ANNUAL ADMINISTRATION REPORT

OF THE

FOREST DEPARTMENT

OF THE

MADRAS PRESIDENCY

FOR THE

TWELVE MONTHS ENDING 30TH JUNE 1913.

1912-1913.

MADRAS:
PRINTED BY THE SUPERINTENDENT, GOVERNMENT PRESS.

1914.

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NORTHERN CIRCLE, 1912–1913.

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FOREST ADMINISTRATION REPORT OF THE NORTHERN CIRCLE

FOR THE

FOREST YEAR ENDING 30TH JUNE 1913.

CHAPTER I.—CONSTITUTION OF STATE FORESTS.

1. Alteration in Area.

The following statement shows the abstract of changes in forest areas :—

Class.	Area on 1st July 1912.	Added during the year.	Excluded during the year.	Net increase or decrease.	Area on 30th June 1913.
	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
Reserved forests	4,617	..	3	— 3	4,614
Reserved lands	164	99	..	+ 99	263
Total ..	4,781	99	3	+ 96	4,877

Two small blocks each less than half a square mile in *Vizagapatam* and one such block in *Kurnool South* were constituted reserved forests and the remaining changes were due to recomputation of areas on recently published maps. Four blocks in *Gōdāvari Upper* (two over one square mile each and two less) and three in *Kurnool South* (less than half a square mile each) were made reserved lands.

2. The total forest area under the control of the Forest Department was 4,877 square miles which (excluding zamindari and inam lands) is 27·40 per cent. of the total area.

2. Forest Settlement.

3. Twelve blocks (161 square miles) remained to be settled at the commencement of the year, to which seven (99 square miles) were added during the year ; of these, three blocks (·55 square mile) were transferred to reserved forests leaving 16 blocks (259 square miles) at the end of the year. Of these 16, settlement was completed and notification under section 16 was issued, but to take effect from 1st July 1913, for four blocks (5 square miles) ; publication of notification by Government was awaited for two blocks (·02 square mile) ; settlement completed but not reported to Board for two blocks (75 square miles) ; and settlement was proceeding for eight blocks (179 square miles), *i.e.*, one in *Ganjām* (70 square miles), one in *Vizagapatam* (10 square miles), four in *Gōdāvari Upper* (99 square miles) and two in *Kurnool South* (·03 square mile).

3. Demarcation.

4. Excluding demarcation of dupati lands in *Gōdāvari Upper* 59 miles have been newly demarcated at a cost of Rs. 1,854 ; 263 miles repaired at a cost of Rs. 1,543 and 4,657 miles recleared by Forest subordinates free of cost. The average cost per mile of fresh demarcation was Rs. 31–6–9 and of repair Rs. 5–13–10 against Rs. 19–2–7 and Rs. 1–13–10 in the previous year, the increase is due to payment in some districts having been made for the previous year's work.

4. Forest Surveys.

(*a*) *By Survey of India.*

5. No new work was undertaken during the year. Of the index maps undertaken during the previous year that for *Gōdāvari Upper* has been published and the rest are under different stages of completion.

(*b*) *By Departmental Surveys.*

6. During the year Rs. 10,626 were spent on Forest surveys and maps were prepared for 46 square miles of reserved forests. The chief work of survey done

were 92 miles in Chokkapad forests in *Ganjām* and alignment of 115 miles of a 700 feet level line in *Gōdāvari Upper*. Minor works such as alignment of roads, verification of boundaries, cutting of fire lines, etc., were done in the remaining districts. Seventy-six maps in *Ganjām* and 20 in *Gōdāvari Lower* were prepared for reserves; working-plan maps in *Kurnool South* and coupe maps in *Vizagapatam* were also prepared.

Dupati Survey.—Bhadrachalam dupati survey was brought to a close by completing 89 villages. There were 71 appeals, of which 45 have been disposed of.

CHAPTER II.—MANAGEMENT OF STATE FORESTS.

1. Regulation of Management.

(a) *Preparation and Control of Regular working-plans.*

7. *Preparation – Vizagapatam.*—Original working-plans for five reserves, and revised working-plan for one reserve, received during the year and returned pending final orders on Forest Committee's report as they related mostly to grazing, have not yet been received back. *Gōdāvari Lower.*—Statistics were collected for preparing final working-plans for Coringa and Kandikuppa reserves, but the progress was slow as there was no separate Range officer for the Delta Range for seven months. *Kistna.*—The working-plans for the reserves in Bezwada and Ellore Ranges for 92 square miles and the revision of the working-plan for Gopuvanipalem reserve were sanctioned. *Kurnool South.*—Working-plans for the Nallamalais in Giddalore Range, for the Railway Working Circle and for the Veligondas were received and returned for revision and have not yet been received back. The preparation of Owk working-plan is held under abeyance pending receipt of orders on Forest Committee's report. *Kurnool West.*—The revised working-plan for the Yerramalais and the preliminary working-plan for a portion of Gundlabrahmeswaram Range were sanctioned.

8. *Control.*—The working-plans for Mallavaram, Devancheruvu and Rāmēswaram reserves and for Peddapur Range in *Gōdāvari Lower* were cancelled. The prescriptions of working-plans have been adhered to in the main except in the following cases:—

Ganjām.—Less dead timber was extracted owing to want of demand and 11 fuel and bamboo coupes not prescribed for the year were leased out to contractors.

Gōdāvari Lower.—Thinning on the high forest system in Coringa reserve was not done as it was considered unnecessary.

Kistna.—The brushwood resulting from creeper cuttings and fellings was burnt for want of demand and spread over the coupe area.

Kurnool West.—Improvement fellings continued to be worked under the system of "Coppice with standards" in Atmakur and Velgode Ranges.

(b) *Annual Plan of Operations.*

9. The sanctioned plans were generally followed, except as detailed under working-plans above, and in the following instances:—Certain roads and buildings had to be given up, in *Ganjām* to curtail expenditure, in *Kistna* and *Kurnool South* as labour was not found, in *Gōdāvari Lower* and *Kurnool South* as other works were found more urgent, and in *Gōdāvari Lower* and *Kistna* as they were considered unnecessary. Certain felling operations had to be stopped in *Gōdāvari Lower*, *Kistna* and *Kurnool East* as contractors were subsequently forthcoming, and in *Kurnool East* as the demand was also otherwise met. Certain buildings had to be taken on hand in *Ganjām* and *Kurnool South* being more urgent though not provided for in the plan. A larger quantity of Kamala powder was purchased in *Ganjām* to meet the demand therefor. Hay-making in *Kistna* was given up as the previous year's operation resulted in loss. Subordinates quarters at Mallavaram in *Gōdāvari Lower* was not constructed owing to delay in acquisition of site. Further casuarina planting and watering in *Kistna* was given up under recent orders.

2. Communications and Buildings.

10. The following figures compare the outlay on communications and buildings:—

	1911-12.	1912-13.
	RS.	RS.
Roads and bridges	41,458	35,887
Buildings	59,450	49,113
Other works	6,714	5,605

The decrease under all the heads is due to greater scrutiny exercised in selecting works and postponing works which were not urgently required in order that expenditure may be curtailed.

(a) Roads and Bridges.

The important works of a permanent nature carried out were—*Ganjām.*—Ten miles of new roads were constructed and 20 miles of existing roads repaired ; a second bridge over Oddanginala was also constructed ; *Vizagapatam.*—Seventeen miles of existing roads were repaired ; *Gōdāvari Upper.*—The 700′ height level line commenced in the previous year was extended by 106 miles and completed ; *Gōdāvari Lower.*—Mallavaram road which meets the local fund road at Rajavommangi and Rajavommangi-Boyapad cart-track were completed ; *Kistna.*—Nallacherla-Kodigudem road was partly constructed ; *Kurnool South.*—Nine miles in Isukagundam-Diguvametta road, three miles in Ahobilam-Raghupathimantapam road and five miles in Sandrapodu-Gundlamotu road were constructed ; and *Kurnool West.*—Three miles in Aiyyavarikodur-Honkaram cart-tract was constructed, and eight miles of the Central Nallamalai road repaired.

(b) Buildings.

The important works of a permanent nature executed during the year were the following :—

Extra Assistant Conservator's bungalow at Rusellkonda (nearing completion) in *Ganjām*, Range office at Jangareddigudem in *Gōdāvari Lower*, Range offices and quarters at Tarsingi in *Ganjām*, Yellamanchili in *Vizagapatam*, Turimella in *Kurnool East*, offices and quarters for Range staff in Railway Working Circle (completed) and Giddalore (completed) Ranges in *Kurnool South* and the two Plateau Ranges of Pecheruvu (completed) and Gundlabrahmeswaram (completed) in *Kurnool West*, Deputy Rangers quarters at Pajibara in *Ganjām*, Maddipenta in *Kurnool East*, Deputy Rangers and Foresters quarters at Malakondapenta for Gundlakamma and Railway Working Circle Ranges in *Kurnool South*, subordinates quarters at Rudracode, Pangidi, Pasurutla and Velgode in *Kurnool West*, rest-houses at Thamana (completed), Gambariguda (completed), Chahalli and Gerada in *Ganjām*, Thadaparti in *Vizagapatam*, Dornal in *Kurnool East* and additions such as kitchens, out-houses, etc., to existing buildings and several sheds to house forest guards and watchers', etc.

(c) Miscellaneous works.

The chief works done were the construction and repair of tanks, kuntas and wells, excavation of canals and channels and erection of fences.

3. Protection of Forests.

(a) General Protection.

11. The following statement shows the number and classification of forest offences brought to light during the year :—

Class.	Injury to forest by fire.		Unauthorised felling or appropriation of wood and minor forest produce.		Grazing without permission or in tracts in which grazing is prohibited.		Other offences.		Total.	
	1911-12.	1912-13.	1911-12.	1912-13.	1911-12.	1912-13.	1911-12.	1912-13.	1911-12.	1912-13.
Reserved forests and lands.										
Cases taken into Court ..	11	8	540	516	206	186	57	49	814	759
Cases compounded ..	5	4	1,596	1,298	731	611	229	119	2,561	2,032
Cases undetected ..	137	139	89	92	7	6	6	3	239	246
Total ..	153	151	2,225	1,906	994	803	292	171	3,614	3,037
Unreserved lands.										
Cases taken into Court ..	..	..	..	55	..	..	..	1	..	56
Cases compounded ..	..	2	..	510	..	..	..	3	..	515
Cases undetected ..	..	1	..	76	..	..	..	..	..	77
Total ..	..	3	..	641	..	..	..	4	..	648
Grand Total ..	153	154	2,225	2,547	994	803	292	175	3,614	3,685

* Last year's figures were not furnished for unreserved lands by some Collectors.

There has been a slight increase in the total number of cases contributed chiefly by offences under unauthorised fellings; grazing and other offences show decline. The total number of cases reported fell in *Ganjām* and two *Gōdāvaries* and rose in *Kistna* and three *Kurnools*; excepting in *Ganjām* and *Kurnool South*, offences under "Grazing without permits" showed decline. Unauthorised fellings increased in *Gōdāvari Upper* and *Lower*, *Kistna*, *Kurnool South* and *West*, in the last of which professional timber thieves were infesting Nallamalais near Atmakur, and a special enquiry to see who is responsible for such a state was being held; it is however gratifying in that district that all other offences show decrease.

12. There were 816 cases pending at the beginning and 585 at the end of the year; of these latter 163 were with Magistrates. Out of the cases brought to trial during the year 877 ended in conviction, 93 in acquittal against 740 and 58 respectively in the previous year; the percentage of failure being 9·59 against 7·27 in the previous year.

CLOSURE OF FORESTS TO GRAZING FOR NOT REPORTING OR PREVENTING ILLICIT GRAZING OR OTHER OFFENCES ON A LARGE SCALE.

13. Nowhere was the necessity found except in *Kurnool West*. A large number of standards in the Musalimadugu coupe of that district have been illicitly cut and the Sub-divisional officer was deputed to enquire and report if the reserve can be closed for the villagers.

14. Two thousand three hundred and three cases were compounded for Rs. 14,345 against Rs. 19,161 in the previous year.

15. Rewards were granted only in *Kurnool South* and *West*; in the former Rs. 12 were disbursed amongst Garladinne villagers for aiding in the detection of a case of illicit removal of timber from Jaladurgam reserve, and in the latter Rs. 40 were disbursed amongst forest subordinates and two private individuals in four cases of illicit removal of timber and one of grazing 600 goats and 40 sheep, and Rs. 8 to eight men in helping in the recapture of the elephant Ravi; rewards were also granted to Chenchus for protecting a large area of the forest round their gudems from fire.

(*b*) *Protection from fire.*

16. The areas attempted and protected are given in Form No. 72. The system of protection was not altered except in *Kurnool South* where a fire line in Sirvel Range was given on contract to be, cut free of cost to Government, in return for which the contractor was allowed to take free the produce resulting in the operation. The work was satisfactorily done and reduced fires in that range. In all Goomsur ranges of Ganjām except Pondakhol the boundary between the zamindary and agency tracts was converted into 60′ wide fire line. In *Gōdāvari Lower*, 99 miles of boundary of Papikonda, Kovvada and Kopalli reserves were widened to 40′ to prevent crossing of fires. In *Ganjām*, the fire season was short but sharp, almost all fires occurring in the latter half of May 1913, the unprotected hill areas were almost all burnt owing to the carelessness of the subordinates; in several reserves of Surada Range the cause for fires were the kindling by graziers, to punish whom the Board sanctioned the collection of double-grazing fees in three reserves during 1913-14; Khonds, except in one or two instances, assisted in extinguishing fires, in return for which they were allowed the usual concessions; the Khond villages which neglected this work had their concessions cancelled; in Pondakhol, the Khonds were rewarded with rice also, worth Rs. 246, for help rendered. In *Vizagapatam*, though the season was exceptionally dry the results have been more favourable than the previous year. In *Gōdāvari Upper*, large areas were burnt but correct statistics were not furnished owing to Range officers—Nugur and Cherla—not furnishing fire occurrence reports for 82,570 acres; the delinquents will be suitably dealt with. In *Gōdāvari Lower*, also the figures furnished are of doubtful accuracy, a Deputy Ranger and a Forester who failed to extinguish fires in their beats were punished; a fire protection scheme for this district is under preparation. In *Kistna*, the season was a mild one. In *Kurnool East*, the protection was reported to be better owing to the tactful way in which a Deputy Ranger managed the Chenchus; the system of departmental collection of Ippa flowers for free distribution to Chenchus had also the effect of reducing fires. In *Kurnool South*, certain permanent fire patrols were suspended for two months for not extinguishing fires in their charges or not finding out their source; fires in Railway Working Circle Range were reported, in a great measure, to have been due

to departmental cartmen firing to facilitate their dead wood collection work. In *Kurnool, West*, it was satisfactory to note the keenness with which the Chenchus of Sudem, Pangidi and Rudracode tried to protect the forests in their neighbourhood to earn reward. This is no doubt a great step in advance, for they were the persons from whom incendiarism was dreaded in the past; the consequence this year was that a large area never before protected has been saved; the full reward, of course, of Rs. 200 was sanctioned for them; the whole of Nandyal Range was burnt over owing to the unsettled state of the fire line boundary between the *South* and *West* divisions, but arrangements have since been made to settle this question in a practical way: in Atmakur Range the Chenchus indulging in dacoities burnt also a lot of forests; they would not obey the order regarding the collection of Ippa flowers.

17. Rupees 57,561 were spent on fire protection during the year. The area dealt with was 4,479 square miles against 4,461 square miles in the previous year. Of these, 3,745 square miles were successfully protected against 3,643 square miles in the previous year; the proportion of failures fell to 16·39 from 18·32 per cent. in the previous year; the cost per square mile successfully protected fell to Rs. 15–5–11 from Rs. 17–7–3 in the previous year.

18. The following statement shows the number and origin of fires :—

Division or circle.	A. Fires caused by accident or through carelessness in burning fire lines.		B. Fires entering the forest by crossing exterior fire traces.		C. Fires beginning inside the reserve or fire-traced areas. Owing to carelessness or accident. By workmen employed in the forest, by purchasers of forest produce and by hay-cutters.		By villagers, travellers, etc., passing through the forests		By railway engines.		By lightning or fire-baloons.	
	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.
1	2	3	4	5	6	7	8	9	10	11	12	13
Ganjām	..	..	..	..	..	..	..	..	..	..	..	..
Vizagapatam	1	2,000	4	1,600	6	1,334	6	12,131	..	..	..	..
Gōdāvari, Upper ..	..	..	9	14,919	..	..	2	355	..	..	..	..
Gōdāvari, Lower ..	..	..	12	12,878	2	1,600	38	1,856	..	..	..	..
Kistna	3	34	..	..	..	..	9	334	..	..	..	..
Kurnool, East	..	..	..	..	..	..	6	3,855	..	..	..	..
Do. South	8	17,670	7	6,902	..	..	13	13,778	2	153	..	..
Do. West	1	·20	6	1,250	2	110	16	6,672	1	6	..	..
Total for 1912–13 ..	13	19,704·20	38	37,549	10	3,044	90	38,981	3	159	..	..
Total for 1911–12 ..	17	2,079	48	143,672	10	5,830	58	1,00,131	1	5	..	..

Division or circle.	C. Fires beginning inside the reserve or fire-traced areas—*cont.* By intentional firing. In order to obtain new grass.		In order to turn out game or to reduce cover.		Maliciously fired.		Total.		Causes unknown.		Total A, B and C and causes unknown.	
	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.
	14	15	16	17	18	19	20	21	22	23	24	25
Ganjām	..	..	..	..	3	105	3	105	92	51,354	95	51,459
Vizagapatam	2	1,360	..	..	..	..	14	14,825	8	699	27	19,124
Gōdāvari, Upper ..	..	..	1	3,200	..	..	3	3,555	12	100,531	24	119,005
Gōdāvari, Lower ..	..	..	..	..	..	..	40	3,456	11	3,272	63	19,606
Kistna	..	..	..	..	..	..	9	334	..	..	12	368
Kurnool, East	2	1,290	..	..	..	..	8	5,145	22	97,986	30	103,131
Do. South	..	..	..	..	..	..	15	13,931	28	19,183	58	57,686
Do. West	4	135	..	..	6	44,012	29	50,935	29	69,245	65	121,430
Total for 1912–13 ..	8	2,785	1	3,200	9	44,117	121	92,286	202	342,270	374	491,809
Total for 1911–12 ..	3	2,163	13	4,318	16	32,737	101	145,184	133	200,355	299	491,290

There seems an appreciable increase in the number of cases, though the area burnt remains nearly the same as in the previous year. Too much reliance must not be placed on these figures, as some Range officers still suppress facts, though such irregularity is undoubtedly less than it used to be. From the figures furnished it is seen that the number of cases decreased under A and B, *i.e.*, " Fires caused by accident on through carelessness in burning fire lines " and " Fires entering the forests by crossing the exterior fire traces ", but considerably increased under C, *i.e.*, " Fires beginning inside the forests or fire traced areas " and " Causes unknown ".

(*c*) *Protection from Cattle.*

19. Out of 4,877 square miles 898 were closed to all animals throughout the year against 811 in the previous year, *Kurnool*, *South* and *East*, contributed to the increase. 155 square miles were open to goats against 156 in the previous year.

20. The following statement shows the cattle impounded during the year compared with the average of the three years preceding :—

Districts.	From open forests.		From closed forests.				Total.		Average for three years ending 1911–12.
			Holding permits for open forests.	Having no permits.	Holding permits for open forests.	Having no permits.			
	1911–12.	1912–13.	1911–12.	1911–12.	1912–13.	1912–13.	1911–12.	1912–13.	
Ganjām ..	3,273	1,883	..	240	..	290	3,513	2,173	3,791
Vizagapatam .	1,034	786	..	1,209	..	80	2,243	866	2,536
Gōdāvari, Upper.	329	53	..	379	..	..	708	53	240
Do. Lower.	549	513	..	704	312	418	1,253	1,243	1,258
Kistna	2,881	1,891	274	897	686	1,146	4,052	3,723	3,810
Kurnool, East ..	7,201	4,210	.	..	..	..	7,201	4,210	3,313
Do. South.	6,374	1,614	162	681	121	246	7,217	1,981	8,296
Do. West ..	8,904	9,418	..	1,792	..	1,514	10,696	10,932	13,462
Total ..	30,545	20,368	436	5,902	1,119	3,694	36,883	25,181	36,705

The averages show fall in all districts but *Kurnool*, *East*, and the past year's figures show a small rise in *Kurnool*, *West.*

(*d*) *Protection against injuries from natural causes.*

21. In *Ganjām*, the spread of root fungus *Trichosporum vesiculosum* in Agastinowgam plantation has practically stopped but *Arebela tetraonis* continued its depradations. In *Gōdāvari*, *Upper*, the attack by Jacids on teak leaves has not spread. In *Godāvari*, *Lower*, the root fungus continued its destruction in Kandikuppa and Bendamurlanka plantations. In *Kistna* the burning of the debris and spreading the ashes on the area to be planted to prevent insects was continued with good results. No damages by the *borer* or *blister fungus* were done in any of the casuarina plantations, but sandalwood borer was found to kill sandal plants in Kandikuppa reserve. In *Kurnool*, *East* and *West*, leaf defoliators attack teak as usual, and in the former district sandalwood branches were also attacked by some insects.

4. SYLVICULTURE.*

(*a*) *Natural reproduction.*

22. Reproduction from seed in *Ganjām* of sal, sahajo, paisal and sissua was good; in *Vizagapatam*, very good generally in many localities, and especially so of satinwood almost everywhere; in *Gōdāvari*, *Upper* and *Lower*, of kondathangedu, chiruman, etc., good; in *Kistna*, in all unburnt closed areas of Ellore range good, in all the reserves of Bezwada excellent; in *Kurnool*, *East*, of nallamaddi, billudu, chirumanu, tunki, and kanuga along the banks of streams, good; in *Kurnool*, *South*, of yegi, teak and blackwood poor to *nil*, yegi and ippa totally failed, and in *Kurnool*, *West*, of yegi, jittegi, etc., numerous and excellent all over the areas where cover has been removed, but in Atmakur range the young advanced growth of

* List of trees with their scientific names will be found in Appendix E.

teak was damaged considerably by the fire in the improvement coupe. Reproduction from coppice shoots, in *Ganjām*, of sal was vigorous in the coupes worked over; in *Vizagapatam*, excellent in all such coupes; in *Gōdāvari*, *Lower*, good to very good, except of bamboos due to bad cutting by contractors for which they were punished; in *Kistna*, satisfactory in Bezwada and Ellore ranges, and in *Kurnool*, *West*, vigorous in improvement felling and fuel coupes, but damaged in Nandyal range owing to spreading of fire through the coupes. Root-suckers, in *Kurnool*, *West*, of jittegi and tumki were observable throughout the improvement felling coupe. In *Kistna*, musti yielded no crop, soapnut and tamarind poor crop in Ellore range, but mangrove was abundant in some reserves. In *Kurnool*, *West*, jittegi was plentiful except where bamboo growth was thick.

(*b*) *Artificial reproduction.*

23. Form 75 shows the areas under plantations and topes or subject to cultural operations.

Regular plantations.—*Ganjām*: Agastinowgam plantation was ordered to be abandoned as soon as the stock in it is cleared out. Malabar cocoanut trees continue to grow slowly. Red sanders in Napier's Park flourish exceedingly well. *Vizagapatam*: Red sanders dibbled along the ghat road in Sanivaram and Dharakonda reserves and on 9 acres in Pandirimamidi germinated, 305 on the former and 40 on the latter but only 133 in all were surviving. Mixed species were sown on 20 acres in Rambilli reserve. *Gōdāvari*, *Upper*, Plants put out in the previous year were reported to be generally doing well, but most of them in some localities have died away; planting in bungalow compounds with teak, jittegi and mango continued. *Gōdāvari*, *Lower*: Compartment XIV of Kandikuppa and V of Bendamurlanka were planted with casuarina. *Kistna*: 10,400 plants of mixed species such as casuarina, sissu, were planted over 9 acres in Narasapur plantation of which 15 per cent. died. *Kurnool*, *East*: teak, yegi and sandal were sown in the five plantations existing, and the results were very poor in Peddamantrala and Telugurayanicheruvu, fair in Maddipenta and good in Chinamantrala and Peddachama. In the last, numerous teak seedlings have established themselves; owing to scarcity of water, these plantations, as such, are failures, but as a means of getting all the Chenchus together and under control have been most useful; the services of the Chenchus will now be utilized in other more useful directions. *Kurnool*, *South*: The plantation at Ahobilam has been given up owing to scarcity of water; the remarks in *East Kurnool* apply, but the plantation is in a better condition as such. *Kurnool*, *West*: The plantations in this division are eminently successful owing to abundance of perennial water; and it is a great thing to note that these useful works have been carried out by Chenchus, a tribe formerly considered quite outside the pale of civilization. That at Bairluty was closed at the end of the year after planting five acres with teak, neem and mixture of nallamaddi, jittegi and mahagony as there will be no work in it for the future. It is in excellent condition the biggest teak plant therein being about 12 feet high. In Nagaluti 40 acres were planted with teak, neem, mallamaddi, chinduga and red sanders, 75 per cent. survived. The brick channel in it was extended to run for nearly half a mile to facilitate irrigation; the largest teak plant here measured about 12 feet and neem 14 feet. In Velgode range 23 acres at Sudem, 38 at Pangidi, 34 at Rudracode and 35 at Pasurutla were clear felled, and teak, neem, yegi. Nallamaddi and nallachinduga seeds were sown (teak seeds formed 50 per cent.). Besides these 1,100 mahagony and 12,000 red sanders were also planted in them; teak grew best, neem came next, yegi and red sanders were slow in coming. The areas planted at Sudem and Pangidi stand best, even though watering in the former was stopped for two months, and in the latter for a fortnight in summer. At Pasurutla the seedlings were slow in coming up, but the sandal areas at Pecheruvu produced good results. In the sandal areas, grass and the tops and branches of hosts were removed for allowing space to the growing sandal. At Honkaram $12\frac{1}{2}$ acres were cleared and teak, neem, satinwood and dirisana were planted; teak and neem were flourishing and the other two appeared to have slow growth.

Taungya operations.—No operations were undertaken during the year. The 10,000 teak, 8,300 yegi plants reported last year to have been surviving, have died during the year.

Cultural operations.—Gōdāvari, Upper: 2,833 teak and 472 jittegi were newly planted during the year at Darapalli out of which and the previous years' plantings 8,033 teak, 2,324 yegisi, 1,309 jittegi and 10 jack are reported to be surviving. *Gōdāvari, Lower* : Mangrove seeds were sown on 100 acres of Kandikuppa and 121 acres of Coringa reserve but the results were poor apparently because the areas were on a higher level and beyond the reach of ordinary tides of the sea. Teak, nallamaddi, chairumanu and margosa sown in Rajahmundry reserves were not also successful. *Kistna*: Teak, red sanders, etc., sown in coupes worked over in Bezwada range and similar valuable species sown in five reserves of Ellore range germinated, but died in the hot weather ; babul seeds sown on three cotton growing areas in Bandar range shared similar fate ; basketed teak plants however were thriving well, so also the 615 sandal plants in Kondapalli bungalow. *Kurnool East.* Teak raised in bamboo tubes did not thrive well, so the plants were transferred to baskets, but these were found to rot in nine months. *Kurnool, South*: Over 48 acres in coupe 6 of Owk Working Circle pits were dug and mounds made, seeds were sown in coupe 5 and casualties in other coupes were refilled. This work is being stopped, as it is unsuccessful and not on sound principles. *Kurnool, West*: Sowing of yepi and neem on 1 coupe of Woddaman, and of babul and neem on 2 of Veldurti, was made on mound and trench system, but the results were not good as the sowings were late ; the delay could not be avoided as the making of trenches takes a long time and could not be taken up before the monsoon as the ground then would be very hard ; so one year's mounds will have hereafter to be used the next year. To give work to the Chenchus as usual at Indreswaram, mound sowings were made on ten acres, the plants came out very well but owing to failure of monsoon only 105 survive. On fifty acres in Musalimadugu old fuel coupe neem, teak, etc., were dibbled, 50 per cent. germinated but almost all died in summer; as this operation proved a thorough failure in successive years, it will not be carried out next year.

Wholesale cultural operations will hereafter be put a stop to in most places, but certain experiments in certain localities, *e.g.*, babul on the salt swamps of the delta, or the introduction of certain valuable species, *e.g.*, sandal and red sanders, in suitable localities, or the utilization of certain hill tribes, *e.g.*, Chenchus, Koyas, etc., on such operations to keep those tribes together and under control, must be persisted in. Planting the reclaimed area round the Conservator's bungalow at Waltair has now been completed.

(*c*) *Operation for the improvement of growing stock.*

24. Improvement felling, thinning, coppicing, clear felling, cleaning and weeding and removing dead wood for the improvement of growing stock are detailed under " Exploitation. "

Creeper cutting.—This was done as usual by subordinates in *Ganjām* and *Gōdāvari Lower*, and creepers and thorny bushes were systematically removed in coupes prior to felling by contractors in *Kistna*. *Fencing.* The coupes felled in Kondapalli reserve in *Kistna* were fenced ; in Owk Working Circle, *Kurnool South* it was done in addition to cultural operations there.

(*d*) *Experiments.*

(i) *On species.*

25. *Sandal—Ganjam.*—Seedlings raised in building compounds were planted with hosts in baskets in good soils, and on broken grounds near other suitable hosts ; if the latter fare well much of such areas in reserves can be turned to advantage ; 28 plants were planted in Napier's Park. *Vizagapatam* : twenty plants in Nathavaram rest-house and Narasapatam range office compound were thriving well, seeds from the latter sown in pots germinated freely. *Gōdāvari Lower* : A small quantity of seed was sown in four reserves of Rajahmundry in three of which none germinated and in the fourth those that came up died subsequently. 1,400 trees in the Conservator's compound at Waltair are doing well ; half a bag of seed was collected and put down and 200-300 seedlings raised.

Mahagony—Ganjām.—The seeds planted in 1908-09 grew slowly. *Vizagapatam*, Waltair : 1 lb. of large leaved mahogany was received, but very few germinated ;

58 trees previously planted still exist *Gōdāvari Upper*: the three in Pulusumamidi range were thriving.

Red sanders—Ganjām.—Those on one acre in Napier's Park about two to six years old were growing exceedingly well, those damaged by the cyclone of 1909 have revived, the large boles coppiced then sent up vigorous shoots. *Vizagapatam*, Waltair: there are 261 trees in the Conservator's compound, the tallest 18'. *Gōdāvari Upper* The two in Rekapalli hill reserve are doing well, *Kurnool West*: these were planted in four plantation centres at 3,000 each; their growth was slow in the beginning, but careful weeding accelerated it.

Logwood—Vizagapatam, Waltair.—There are 359 trees in the Conservator's compound; they grow slowly at first, but suddenly shoot up and thrive well. *Gōdāvari Lower*: Those sown in 1911–12 were thriving in Kandikuppa.

Divi Divi—Gōdāvari Upper.—The three in Edugurallapalli, two in Singaram and one in Tunikicheruvu continued to thrive.

Rubber—Para.—Eighty were planted in Sanivaram but very few survived probably owing to over-exposure to sun and attack by white ants; out of 62 already existing in Pandirimamidi 18 died and the rest thrive.

Ceara.—There are 9 trees in the Conservator's compound at Waltair, *Vizagapatam.*

Assam.—There are 110 trees in the Conservator's compound at Waltair, but they do not do very well, and when young are liable to be attacked by white ants.

Catalpa—Ganjam.—The five which were healthy last year still live, but grow slowly.

Cocoanut—Kistna.—Those in Gopuvanipalem were doing well.

Edible date—Godavari Upper.—One in Murmur bungalow is doing well, two in Boddigudem bungalow are growing slowly and out of 13 in Kunavaram bungalow 11 were washed away in Gōdāvari floods, and the rest thrive.

Loquat, apple, litchi and mango—Vizagapatam.—Half a dozen in each were put out in Sanivaram rest-house, of which two loquat and one litchi died, and the rest thrive.

Pinus longifolia—Vizagapatam.—2,391 seeds were sown in the nursery beds in Sanivaram bungalow compound, out of which 1,097 germinated, they were not thriving owing to white ant attack and consequently attempts were made to transfer them to bamboo baskets.

(ii) *Other points.*

(*a*) *Olibanum*—Kondamamidi were again tapped for this article but without success in *Kistna.*

(*b*) *Test of annual increment.*—With a view to determine the rate of growth in Goomsur areas in *Ganjām*, one acre in each of three coupes was cut over, where felling was carried out at the same time the previous year and where consequently the regrowth was one year old; the outturn was weighed and found to be 4 tons per acre on an average. This is an important experiment, Brandis gives 3 tons as very good for red sanders and other species; casuarina also gives about 3 tons as yearly increment.

(*c*) *Charcoal.*—An experiment in converting dead sal logs on fire lines into charcoal was tried in *Ganjām*, but had to be given up as profitless.

(*d*) *Value of protection.*—The value of rigid protection was beautifully exemplified at Gundlabrahmeswaram in *West Kurnool*; eight years ago that area was a series of cattle pentas, the whole place had been mutilated by hacking, fires raged through it yearly, and often two or three times a year, and the ground between the scattered trees was covered with dense bamboo and climbers, but of reproduction there was practically none; for the last six years grazing and hacking have been stopped *in toto*, and for five out of the six years the area has been rigidly protected from fire, a big fire last year unfortunately occurring; during the past year 250 acres have been cleared of bamboo and climbers, stock being taken, acre by acre, and of reproduction over 300,000 young plants have been found, of which over 66,000 were of *Blackwood*, *Ougeinia*, *Teak* and *Pterocarpus marsupium.*

5. Exploitation.

(a) System of management.

26. The total area for which regular working plans were sanctioned was 1,345 square miles and the areas dealt with under the different sylvicultural systems are detailed below :--

Sylvicultural systems.	Area in sq. miles.	Per cent.
(1) Clear felling	117	8·7
(2) Selection felling	* 438	32·6
(3) Simple coppice felling	35	2·6
(4) Coppice with standards felling	285	21·2
(5) Improvement felling	† 49	3·6
(6) Unworked area	421	31·3
Total ...	1,345	100

Working-plans have been held in abeyance awaiting, first the report of the Forest Committee, and secondly the Government orders thereon ; but little can be done until areas required for grazing have been separated off from other areas, there can be no proper reproduction for fuel and timber growth where there is grazing, and in grazing areas such reproduction is necessary for fodder requirements at times when there is no green grass, wherefore the amount required to be eaten should just balance the capability of the soil to reproduce it, with just a slight margin above in the latter to guard against accidents.

(i) *Major Forest Produce.*

(1) *Clear or regeneration fellings.*

27. Two coupes in *Gōdāvari Lower* were sold to contractors to be worked under this system : 5 in Bezwada, 3 in Ellore, and 3 in Bandar ranges in *Kistna* ; and the areas required for regular plantations in *Kurnool West* were similarly treated.

(2) *Selection Fellings.*

28. One hundred and twenty large girth sal, dead and dying sal in seven blocks were felled in *Ganjām*, and 2,034 dead and dying sal were selected in the same district but not felled for want of demand. The indent system for valuable species in unreserves, which has been in force here for the previous five years, is growing in popularity. Dead and suppressed trees in two plantations in *Gōdāvari Lower*, soft wood in two coupes in *Kistna*, were sold to contractors. Dead timber and fuel from the reserves of four ranges in *Kurnool East*, from old coupes and fire lines, and green timber and fuel from newly cut lines in *Kurnool South*, and dead timber from hill forests in *Kurnool West*, were removed under this system.

(3) *Regular thinnings.*

29. Fuel in 3 compartments of Bendamurlanka and 2 of Kandikuppa plantations in *Gōdāvari Lower* ; fuel in 12 coupes and bamboos in 2 coupes 8 compartments in *Kistna* ; and bamboos in the leased out coupes in *Kurnool East* were removed by thinning.

(4) *Improvement fellings.*

30. Bamboos from 4 coupes in Goomsur and 2 in Berhampur ranges in *Ganjām*, dead and badly grown teak and billudu were felled in 3 reserves of Ellore range, *Kistna* district, and the right to fell and remove bamboos from certain coupes of the Railway Working Circle and Sirvel ranges of *Kurnool South* was leased out to contractors for the purpose of giving light to the natural reproduction of the better species.

(5) *Coppice with standards.*

31. Six fuel coupes in *Ganjām*, 281½ acres in *Vizagapatam*, 2 coupes in Coringa reserve in *Gōdāvari Lower*, and 3 coupes in *Kistna*, were worked under this system.

* Coppice with standards also was worked on 31 square miles.
† Do. do. 44 do.

(6) *Simple coppice.*

32. Six fuel coupes in *Ganjām*, 20 in *Gōdāvari Lower*, were worked under this system.

(7) *Unregulated fellings.*

33. The right to collect small timber from uureserves which were roughly divided into coupes in 4 ranges of *Gōdāvari Upper* was leased out for Rs. 19,754, and the right to collect bamboos from 2 ranges of the same district, was given on contract for Rs. 8,245. In *Gōdāvari Lower* such fellings were confined to Rampa and the unreserves, and in *Kurnool East* and *West* to some reserves for palmyra trees.

(ii) *Minor Forest Produce.*

(1) *Miscellaneous produce.*

34. In all districts seigniorage was collected on gravel earth and other minerals. The usufruct of mango, tamarind and other fruit trees was sold in auction; the collection of tangedu and other barks, honey, wax, myrabolams, hides, horns, etc., was leased out. The chief deviations were:—In *Ganjām* a majority of topes and trees were left to the enjoyment of Khonds, in *Vizagapatam* and *Gōdāvari Lower*, seigniorage was collected from purchasers from hillmen at weekly markets, and, in *Kurnool*, the collection, other than tangedu and amroy, was made departmentally through Chenchus wherever possible.

(2) *Extraction of fodder.*

35. Pasture lands in Cocanada and Ramachendrapur taluks in *Gōdāvari Lower*, and collection of fodder grass from closed areas in *Kistna*, were leased out: removal of grass free in headloads in *Kurnool East, South and West*, and on permits for cart-loads from four reserves in *Kurnool South*, and of thorns on payment in *Kurnool South*, were permitted.

(3) *Hay-making.*

36. Hay was collected departmentlly in *Kurnool South* for Government bulls; elsewhere it was not resorted to for want of demand, or past experience, showed the undertaking unprofitable.

(4) *Grazing.*

37. The permit system was in force in all divisions. The revenue derived was Rs. 1,28,898 against Rs. 1,10,364 in the previous year, the increase was due to larger number of delta cattle taken to Rampa country in *Gōdāvari Lower*, *Guntūr* cattle to *Kurnool East*, and *Nizam's Dominions* cattle to *Kurnool West*.

(*b*) Agency of Exploitation.

(i) *Government.*

38. Forms 76 and 77 show separately the different classes of produce collected and Form 78 the stock disposed of and the balance remaining. The total quantity of timber and fuel, the number of bamboos and the value of minor produce extracted departmentally were 28·88, 27·39 and 3·82 of their respective total outturn through all agencies, and the total value of disposals was Rs. 2,19,471 against Rs. 3,53,682 in the previous year. Transport was conducted by boat, rail, country carts and buffaloes.

The quantity of timber, fuel and bamboos extracted was 323,766 c. ft. 1,460,144 c. ft., and 4,046,737 against 370,195 c. ft. 4,007,005 c. ft., and 6,135,885 respectively in the previous year; the fall is due to substitution of contract for departmental agency. Minor produce collected was 95,814 against 271,806 maunds in the previous year.

(ii) *Purchasers.*

39. There has been a very large expansion in the removals by purchasers under timber and firewood, by the engagement of contractors in place of departmental extraction; but the number of bamboos extracted is less under both methods. The prepayment system was in force in *Gōdāvari Upper* for removal of produce for local consumption (Koyas and Reddies) from reserves, and from *Gōdāvari Lower* from unreserves and Rampa; driftwood was sold in auction in both the districts.

(iii) & (iv) *Right and Privilege holders and Free grantees.*

40. The following statement shows the estimated quantity and value of produce removed under the above heads :—

Agency.	Timber.		Fuel.		Bamboos.		Minor produce.	Grazing.	Total.	Value in the previous year.
	Cubic feet.	Value.	Cubic feet.	Value.	Number.	Value.	Value.	Value.	Value.	
		RS.		RS.		RS.	RS.	RS.	RS.	RS.
Right and privilege holders.	807	64	1,54,806	2,904	12,293	62	22,784	798	26,612	28,416
Free grantees	22,643	1,923	..	..	47,670	355	102	5	2,385	5,176

(c) OUTTURN AND SOURCES OF FOREST PRODUCE.

Agency.	Timber in cubic feet including sandal-wood.		Fuel in cubic feet.		Bamboos in number.		Minor produce (including grass and grazing) gross value in rupees.	
	1911-12.	1912-13.	1911-12.	1912-13.	1911-12.	1912-13.	1911-12.	1912-13.
1	2	3	4	5	6	7	8	9
Government	370,195	323,766	4,007,005	1,460,144	6,135,885	4,046,737	14,922	10,628
Purchasers (including confiscation).	637,198	1,225,178	1,112,102	2,991,914	13,927,560	10,668,814	265,593	243,732
Right holders	807	807	154,806	154,806	12,293	12,293	24,137	23,582
Free grantees	40,397	22,643	560	..	140,825	47,670	102	107
Total ..	1,048,597	1,572,394	5,274,473	4,606,864	20,216,563	14,775,514	3,04,754	2,78,049

41. The variations have been explained where necessary. The rates for grazing fees levied in the several districts are shown in Form 74. The number of animals licensed to grazing on permits was 644,555 against 570,607 in the previous year.

CHAPTER III.—FINANCIAL RESULTS.

42. The financial results of the Circle compared with those of last year and the average of the five preceding years show a net increase of Rs. 82,328 and Rs. 7,981 respectively.

—	1912-13.	1911-12.	Average of preceding five years.
	RS.	RS	RS.
Revenue..	7,83,196	8,30,433	7,41,481
Expenditure—			
"A. Conservancy and Works" including "Refunds."	4,47,803	5,87,457	5,03,351
"B. Establishments"	3,97,182	3,87,093	3,07,900
Total expenditure ..	8,44,985	9,74,550	8,11,251
Net results ..	— 61,789	— 1,44,117	— 69,770

The gross receipts were less than those of the previous year and higher than the average by Rs. 47,237 and Rs. 41,715 respectively.

The A Expenditure is less than that of the previous year and the average by Rs. 1,39,654 and Rs. 55,548. The net results show a deficit of Rs. 61,789 which is due to large expenditure on works of improvement.

The above figures do not show the true working of the year as the revenue is solely interest on our capital whilst the expenditure under A "Conservancy and Works" show large amounts for "Capital" expenditure, and a true balance sheet should merely show the interest on that capital.

Working it out in this manner, the following results are far more accurate :—

			RS.
Total revenue for the Forest year ending with 30th June 1913			7,83,196
		RS.	
A "Conservancy and Works"		4,39,174	
Deduct all "Capital" expenditure as per details given below :—			
	RS.		
A VI-*c* Rs. 9,917 less 10 per cent. for repairs Rs. 992	8,925		
A VII-*a*	24,021		
A VII-*b* Rs. 30,682 less expenditure on petty works Rs. 5,838	24,844		
A VII-*c*	2,941		
A VIII-*a* Rs. 11,941 less establishment Rs. 504	11,437		
A VIII-*b*	828		
A VIII-*e* Rs. 75,627 less establishment Rs. 9,168	66,459		
A VIII-*f*	15,854		
A VIII-*g* Rs. 15,124 less establishment Rs. 4,608	10,516		
		1,65,825	
Balance ...		2,73,349	
Add 4 per cent. interest on "Capital" expenditure of Rs. 1,65,825		6,633	
B "Establishments"		3,97,182	
			6,77,164
Surplus ...			1,06,032

It will be seen herefrom that the *true* working of the year should not show the deficit of Rs. 61,789, but a surplus of Rs. 1,06,032 ; and to complain about a deficit on the recognised, but terribly mixed, mode of accounts, whilst our forests are still impoverished, is wrong.

The total receipts and expenditure for the year fell by 5·68 and 13·29 per cent. respectively.

About 45 per cent. of the expenditure was devoted to the upkeep and improvement of the forests and 55 per cent. to exploitation, etc. It will be observed that the value of timber and other produce at sale depots at the close of the year amounted to Rs. 80,542 which was Rs. 90,028 less than it was at the close of the previous year.

The outstanding revenue at the beginning of the year was Rs. 38,220 and the value of the sales amounted to Rs. 8,31,632. Out of the total of Rs. 8,69,853 Rs. 7,83,196 were collected, leaving an outstanding balance of Rs. 86,657 at the close of the year.

Receipts.

(i) *By Departmental Agency.*

Timber.—Rs. 17,857 due to abandoning the departmental operations and to the sale of previous year's stock in sale depots.

Fuel.—Rs. 71,414 due to leasing of coupes to contractors.

Bamboos.—Rs. 35,001 do. do.

Minor Produce.—Rs. 9,939 due to poor crop of tamarind, etc.

(ii) *By purchasers.*

Timber. + Rs. 42,195 due to larger removals from unreserves and from Rampa.

Fuel. + Rs. 41,276 due to introduction of the contract system.

Bamboos.—Rs. 2,826 due to less demand for bamboos for sugarcane cultivation.

Grazing and Fodder grass. + Rs. 18,534 due to large number of foreign cattle taken to the Nallamalais and Rampa.

Other produce.—Rs. 15,021 due to poor crop of tamarind and to fall in the tree-owners' fees.

(iii) *Miscellaneous (including confiscated drift and waif wood).*

Revenue.+Rs. 2,816 due to driftwood sales fetching more revenue, to sale of large quantities of timber confiscated in late Deputy Ranger Sundarēsa Ayyar's case and to more adjustments on account of steam launch "Thistle."

EXPENDITURE.

A. "Conservancy and Works."

The total expenditure was less than that of the previous year by Rs. 1,40,863 and was due mainly (1) to the advance made in the introduction of contract system, (2) curtailment of road and building programmes in accordance with Government Orders, and (3) to less expenditure on cultural and fire protection operations.

B. "Establishments."

The increased cost of Rs. 10,089 was due to the debiting of the pay and the travelling allowance of the Forest Settlement Officer, Vizianagram Estate, to this Circle, seemingly an unnecessary expenditure.

CHAPTER IV.—ADMINISTRATION.

43. *New District Forest office charges.*—There were no changes during the year. The *Central Gōdāvari* division has not yet been formed.

44. *New Ranges.*—One new Range called the Gudem range uniting all Chanchu gudems under one Ranger was formed in *Kurnool East.* In *Vizagapatam,* four reserves covering an area of 32·10 square miles were transferred from the Golugonda to the Sarvasidhi Range.

45. *Conduct of the Executive Establishment.*—The conduct of the executive staff is fairly satisfactory except in *Ganjām* and *Kurnool, South.*

Good conduct.—The work of Rangers Mir. Abdul Hussain Kirmani Sahib, Abdul Khalak Sheriff, M. Subrayulu Nāyudu, K. C. Belliappa, A. Kristna Rāo, R. Vīraswāmi Nāyudu, P. V. Subrāmayya, V. S. Subrahmanya Ayyar, J. D. David and K. P. Benjamin is specially commended.

Bad conduct.—Two Rangers and four Deputy Rangers were suspended and one Deputy Ranger was removed.

Protective staff.—The conduct of this branch still continues unsatisfactory on the whole. The arrangement of substituting for Guards and watchers, beats on practically an independent basis, by gangs of guards and watchers patrolling under a Deputy Ranger, taking his orders weekly from the Range officer, is under contemplation and being developed in some divisions; this will probably get rid of a large amount of abuse.

Prosecutions.—One ranger was prosecuted for falsification of accounts and misappropriation of Government money, but acquitted. He is under suspension pending departmental enquiry into certain charges framed against him by the District Forest officer. One Deputy Ranger, one Forest Guard, one Depot Gumastah and one Coupe Gumastah were prosecuted and convicted. Two Forest Guards in *Kistna* were prosecuted; but the case is still under enquiry.

Removals and minor punishments.—Sixteen Forest Guards were dismissed, 17 removed, 33 suspended and 8 reduced; whilst among other minor subordinates there were 7 dismissals, 21 removals, 43 suspensions and one reduction.

Foresters.—On the whole they are reported to have worked well; removals 3, suspensions 4 and reduction 1.

Ministerial establishment.—The conduct of the ministerial establishment was on the whole satisfactory. One Head clerk and one Accountant of the District Forest office were temporarily reduced. One Range clerk and one Range peon and one

District Forest office peon were dismissed. One Range clerk and two Range peons removed, and two Range peons and one District Forest office peon suspended.

46. *Health of establishment and casualties.*—The health of the establishment was even worse than usual in *Ganjām*, *Vizagapatam* (Golgonda range), *Gōdāvari Upper* and the *Kurnool Nallamalais*; and good in the remaining areas. One Draftsman, one Clerk, one Forester, one Plantation Overseer, six Forest Guards, three Watchers and one Tanadar died of malaria; one Forest Guard was invalidated. Several subordinates had to take leave on account of ill-health.

47. *Relations between Revenue and Forest officials.*—The relations between the Revenue and Forest officials were cordial in every district.

48. *Service books.*—These are maintained and verified in all the districts.

49. *Tours of the Forest Member.*—Nil.

Conservator's inspections.—Mr. A. W. Lushington was in charge of the circle throughout the year. Two hundred and thirty-two days were spent in camp by him. He visited all the districts and inspected all the District Forest offices.

Touring of the District Forest officers.—All the District Forest officers except of East Kurnool, spent more than six months in camp. The short touring of the Kurnool East District Forest officer was due to the change of officers, to the illness of Mr. Minchin and to his having been in charge of two divisions for about two months.

Inspection of Range offices.—All the range offices were inspected, except one in *Kurnool West.*

Audit of accounts of District Forest offices.—All the District Forest offices, except that of *Kistna*, were inspected by the Auditors from the Accountant-General's office, and the results were reported to be satisfactory.

50. *Imperial Forest College, Dehra Dun.*—Five returned with the higher standard certificate.

Four Government students were deputed to the Forest College at Coimbatore for the course commencing from 1st July 1913.

Vernacular Training School for Forest Guards.—The school was opened at Rudrawaram (*Kurnool, South*) on 1st February 1913 with Rangers N. S. Anantāchārlu and A. J. M. Snaize as instructors. Out of 8 Foresters and 22 Forest Guards deputed, one was suspended. Two Foresters and one Forest Guard obtained first, 4 Foresters and 9 Forest Guards second, and 2 Foresters and 11 Forest Guards third-class certificates.

51. *Work and service of superior officers.*—The following Collectors have commented on the work of their District Forest officers:—

Ganjām.—Mr. Bennett's work was excellent as usual. His intimate knowledge of the district and his tact in dealing with the khonds have frequently been brought to notice by me. There is no doubt that the comparative ease with which forest operations have been carried on in Pondakhol is chiefly due to his influence with the khonds. Mr. Thompson's work was satisfactory.

Vizagapatam.—The work of the District Forest officer was satisfactory.

Gōdāvari, Upper.—Mr. D. A. Stracey was in charge of the division from 12th November 1912, but after a short time he became subject to nervous prostration, and his work since February has been very unsatisfactory, being almost entirely confined to office.

Gōdāvari, Lower.—Mr. Seager worked very satisfactorily throughout the year and has done much to make the division more efficient. His office has much improved and the general tone amongst the subordinates seemed to be better throughout the division. He has toured constantly and taken much pains to introduce reforms.

Kurnool, East.—The work of Messrs. K. Aswatham Nāyudu, Minchin and Madan was satisfactory.

Kurnool, South.—The work of Mr. Barlow-Poole's successors, *i.e.*, Messrs. Minchin and Thompson was satisfactory.

Conservator's remarks.—It is with the deepest regret that the deaths of Mr. B. H. Barlow-Poole, Deputy Conservator and District Forest officer of *South Kurnool*, and of Mr. N. M. Rego, Extra Assistant Conservator and District Forest Officer of *Upper Gōdāvari*, must be recorded; whilst Mr. Āswatham Nayudu, Extra Assistant Conservator and District Forest Officer, *East Kurnool* became incapacitated and retired on medical certificate; and Messrs. Minchin, Assistant Conservator and District Forest Officer, *East Kurnool*, and Stracey, Extra Assistant Conservator and District Forest Officer, *Upper Gōdāvari* were forced to take leave. Another loss to the Circle is Mr. H. F. A. Wood, who after ten years' most excellent service in *West Kurnool* has since the close of the year, been transferred to Coimbatore; during his tenure of office there has been a regular revolution and transformation of administration in that division; the permit system abolished, grazing and fires far more under control, the Chenchus taken in hand and gradually (though by no means perfect yet) being transformed from murderous and thieving vagabonds to useful forest workers, and general operations from a state of chaos into a methodical system of working.

As regards other officers I agree generally with the remarks of the Collectors.

52. *List of Vernacular names of trees.*—This is now in the press, but the correction of proofs is a laborious work; it is hoped, however, to be completed shortly.

CHAPTER V.—GENERAL.

(*a*) Rules under the Forest Act.

53. (i) *Timber Transit rules.*—The rules worked well in all the districts. Amendments to the river transit rules reducing the number of checking stations on the Gōdāvari and simplifying the method of check were sanctioned towards the end of the year. The enforcement of the rule that printed permits should be procured for the removal of any timber from private lands in Nallakalva village, adjacent to the Nallamalais, had a wholesome effect, and illicit removals under cover of removals from darkhast lands were stopped.

(ii) *Rules under section* 26 *of the Forest Act.*—The privileges allowed by these rules were generally availed of by the people and there were no complaints nor abuses except in *Vizagapatam* and *Gōdāvari, Lower*. In *Vizagapatam*, seven cases were reported, of which one was convicted, three were compounded, two acquitted and one is still pending. In *Gōdāvari Lower*, the hillmen of the Polavaram range complained of the restriction placed on podu cultivation by prohibiting within one chain from the boundary of a reserved forest. This is under enquiry.

(iii) *Rules framed for the collection and disposal of drift wood.*—These rules continued to work smoothly.

(iv) *Rules for the guidance of the Forest officers in compounding forest offences.*—The rules are reported to have worked satisfactorily in all the districts.

(v) *Rules framed under the Forest Act for private forests.*—The Jeypore and Vizianagram rules worked fairly well, but some amendments, now under consideration, appear necessary; no complaints were received from the villagers residing in villages near the reserved areas. In Jeypore no new forests were notified during the year; but several proposals were under enquiry and some have since been submitted to the Board. In Salūr the rules were not brought into force during the year under report. In Madgole 87 square miles of the forests notified under section 29 are being demarcated.

(*b*) Supply of Forest produce to meet the wants of the people.

54. (i) *Development of the coupe and depot system.*—The permit is only used for grazing and minor produce in all the districts. A great advance has been made in the introduction of the contract system. In *Ganjām*, timber, fuel and bamboo coupes were sold standing to contractors. In *Vizagapatam*, coupes in convenient localities for the supply of fuel, timber and bamboos were worked. The permit system was in force in unreserved areas and, as regards the reserved forests, in respect of bamboos

only in the Dharakonda-Sanivaram Working-plan and in certain other coupes where the demand is purely local and small. In *Gōdāvari Upper*, the inhabitants of the Bhadrāchalam taluk are allowed the privilege of cutting and removing classified and unclassified timber from unreserves free of cost for domestic and agricultural purposes. The requirements of others are met by the issue of permits for produce from reserves on payment. In *Gōdāvari Lower*, all Government sale depots were closed, and the distribution and sale of forest produce were left in the hands of contractors to whom all the coupes, allotted for working during the year, were sold standing. In *Kistna*, all the sale depots were abolished, and coupes sold standing to contractors who opened depots in all the important towns. In *Kurnool East*, till the end of March 1913, the demand for timber and agricultural implements was met by departmental dead timber operations. Since April 1913 this work was practically stopped and the demand met from the 93 miles of boundary lines which are being cut far the Gudem range. Two bamboo coupes and two fuel coupes were leased out to contractors. In *Kurnool South*, the sale of spokes, felloes, ordinary timber, fuel and bamboos, collected by departmental agency in depots, was continued as in last year; besides, efforts were made to carry out similar work in coupes leased out to middlemen. One such coupe for timber and fuel in Sirvel Range and two coupes for bamboos in the Railway Working Circle Range were sold to contractors. Here for a few years it will be advisable to meet the demand for timber and fuel by supply from the cutting of new fire lines, or enlargement of existing lines, and endeavours are being made to give this cutting and removal on contract, when once those lines have been marked on the ground. Bamboo coupes will be sold to contractors, and, as the bamboos are in such excess that their removal is necessary for the improvement of forest growth, every endeavour is being made to get in every type of bamboo worker in such coupes, whether house-building, medara (basket work, etc)., splits, or remnants for charcoal. In *Kurnool West*, fuel is sold in coupes, and that for the supply of Kurnool town was given on contract according to which the contractor purchased fuel in the Musalimadugu and Bairluti coupes and small timber from the latter coupe. The contractor was not regular in payment and did not get his agreement registered, though it is more than a year since he entered into the contract. He would not buy the 6,000 stacks in accordance with his contract. It was therefore decided to cancel the contract and to sell the fuel and small timber in the coupes to any one that wants them. The monthly auctions of timber in forest coupes, instituted last year, have become popular. One coupe in the Yerramalais was sold standing to a contractor in December 1912; but it was found that the trees were not cut properly flush with the ground. Bamboos were sold in blocks in the Pecheruvu, Velgode and Atmakur Ranges.

55. *Free removal of grass.*—Free removal of grass was permitted in *Vizagapatam*, *Gōdāvari Lower*, *Kistna* and in *three Kurnools*. The concession was freely taken advantage of by the ryots in the *three Kurnools* and was not abused except in the Gadidemadugu reserve, where the ryots broke down the wall in the reserve.

56. *Measures adopted to encourage the growth of manure-leaf-yielding plants.*—Nothing was done in this direction, with reference to paragraph 8 of Government Order No. 564, Revenue, dated 25th February 1913.

57. *Hill tribes.*—In *Ganjām*, the assistance of practically all Khond villagers situated in or near the reserves in Gumsur was enlisted in fire protection as well as in general protection of the forests. Khond villages in Gumsur received concessions in the shape of ploughs, timber, bamboos, thatching grass for repairing their houses, minor forest produce and dry fuel. The concessions granted to six Khond villages were cancelled for failing to protect the forest near their villages from fire and theft. The Pondakhol Khonds worked well on fire protection, road and building works. The villages that showed special interest in the matter of putting out fires were given rewards of rice. The Chokkapad Khonds have so far refused to do the grubbing out of the roots on the demarcation lines; but this is probably due to the bad feeling existing between the Range officer and practically all his subordinates. In *Vizagapatam*, care was taken to avoid giving the hillmen cause for complaint against the working of forest laws, so long as they did not abuse the privileges given to them. In *Gōdāvari Upper*, the Koyas and Reddis continued to do

very little in fire tracing; it was found that insufficient touch between the departmental officers and the Koyas existed; but hereafter every inducement to do forest works, such as demarcation, fire-protection, etc., will be offered. In *Gōdāvari Lower*, the Koyas and Reddis in the Agency tracts continued to be indifferent in the matter of helping the department even in fire-protection and it is under consideration to make the concessions such as free grazing, etc., allowed to them in the reserved forests conditional on their helping the department specially in fire-protection In *Kurnool East*, the Chenchus rendered much assistance in putting out fires, and were employed in plantations and in collecting minor produce. Since April 1913 nearly all the able bodied males are engaged in cutting the boundary lines of the Gudem range. Many are employed as fire patrols, and in this capacity they are more useful than outside villagers. The scheme of departmental collection of ippa flowers is liked by the Chenchus. The several Chenchu gudems were brought under the jurisdiction of a single Ranger, so that all may be subjected to an uniform treatment, which, it is hoped, will improve their condition a good deal. Efforts are being made to start a school at Garapenta for the education of the Chenchu children, a doubtfully wise policy at this stage. In *Kurnool, South*, the Chenchus were employed on plantation works at Ahobilam. A scheme for employing the Chenchus in other directions chiefly in fire-protection of the track between the two Ahobilam temples (7 miles apart) and the loop line round upper Ahobilam gorge, and in the non-fire season weeding the bamboo areas on the Gundlabrahmeswaram principle referred to in Chapter II (4-*d*, ii-*d*), is at present under consideration. In *Kurnool West*, the concessions allowed to the Chenchus were fully enjoyed. They were, as usual, employed on the plantation works, collection of minor forest produce and fire-protection. A reward of Rs. 200 was paid to the Chenchus of Sudem, Pungidi and Rudracode for protecting the forests from fire. This has had a very good effect; and the concession of collection of ippa flowers under departmental supervision, and of distilling arrack therefrom, allowed to the Chenchus continued during the year and was carried out properly in all but the Atmakūr range where stringent measures will be taken to make the Chenchus obey the orders. There is one gudem in this Atmakūr range, *outside* the forests, Indiraswaram by name, which sets a bad example to all the rest, and is encouraged in its misbehaviour by the adjoining villages; some drastic steps seem called for here.

58. *Cultivation in reserved forests.*—No cultivation was allowed in reserved forests in *Gōdāvari Upper* and *Lower*, *Kistna* and *Kurnool South*. In *Ganjām*, cultivation was allowed in a few villages in Pondakhol, where working boundaries were cut. In *Vizagapatam*, the lease of 50 acres in the Chintapalle reserve to one Korapu Chitukulu was renewed. In *Kurnool East*, 105 acres of land in the Markapur reserve of Rachakonda Range was assigned to the Chenchus of Garapenta and Chennapalempenta, for dry cultivation on an annual assessment of As. 2 per acre, in previous years on the condition that they render all possible assistance in stopping fires in the neighbouring forests. In *Kurnool West*, the lease of two plots of lands measuring 42 and 32 acres in extent to some Christians of Gadithamadugu village in the Gadithamadugu reserve at As. 8 per acre were renewed.

59. *Mining and prospecting.*—In *Kurnool South*, Messrs. Khan Bahadur Waljee Laljee Sait and E. P. Stranach applied to surrender the lease granted to them for prospecting diamonds in the Dhone taluk. The Government have approved the issue of a mining lease for diamonds to Mr. Ghose over the whole of Ramavaram reserve. In *Kurnool West*, Mr. A. Ghose continued prospecting for steatite, galena and diamonds in the Yerramalais. Messrs. Beardsell & Co. are prospecting for barytes near Betamcherla. A mining lease for 30 years in favour of both Messrs. Ghose and C. Jamlian of Paris for steatite and magnesite was approved by the Government. Four licenses for prospecting diamonds in the Dhone taluk were also granted to Mr. A. N Pestonjames of Bombay.

60. *Realization of revenue from the usufruct of toddy-yielding trees on Government Waste and poramboke lands.*—The chief revenue was realized in *Ganjām* (Rs. 1,014), in *Gōdāvari Lower* (Rs. 4,564), *Kistna* (Rs. 10,458), *Kurnool East* (Rs. 1,493), *Kurnool South* (Rs. 2,597) and *Kurnool West* (Rs. 16,000).

(c) Live and dead stock.

61. *Live stock*-(a) *Elephants.*—All the elephants in *Ganjām*, *Vizagapatam*, *Gōdāvari Upper*, and *Kurnool West* were in good condition. The second elephant for the *Upper Gōdāvari* has not yet been purchased. (b) *Buffaloes and bullocks.*—The condition of the two buffaloes in *Ganjām* was good. In *Kurnool South*, out of 34 bullocks, two were destroyed being unfit for work.

Inventory of valuable stock.—The stock registers were maintained and verified in all the districts.

Rain-gauges.—Rain-gauges were set up in all the districts and the readings were properly recorded—*vide* Appendix D.

(d) Suits.

62. *Suits.*—In *Gōdāvari Lower*, appeal to the Privy Council in the Coringa extension suit remains to be preferred, copies of records not being ready. A contractor of Rajahmundry filed a suit in the District Court for the recovery of about Rs. 4,000 in a driftwood case. In *Kurnool West*, the pauper suit instituted by contractor Azam Sahib for Rs. 5,444 for work done by him on the Sudem channel is still pending.

Office of the Conservator of Forests,
Northern Circle,
Waltair, 9*th September* 1913.

A. W. Lushington,
Conservator of Forests, Northern Circle.

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FOREST ADMINISTRATION REPORT,

MADRAS PRESIDENCY,

CENTRAL CIRCLE, 1912–1913.

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FOREST ADMINISTRATION REPORT OF THE CENTRAL CIRCLE

FOR THE

FOREST YEAR ENDING 30TH JUNE 1913.

CHAPTER I.—CONSTITUTION OF STATE FORESTS.

1. Alteration in Area.

Reserved Forests.—The following are the variations :—4,086 acres were added by correct computation of areas, 73 acres by transfer from Reserved Lands and 7,184 acres were deducted by disafforestation and revision of areas. The net area of Reserved Forests of the Circle was 5,794 square miles at the close of the year.

Reserved lands.—Fifty-five acres of small areas consisting of enclosures and additions to existing reserves were newly constituted. Seventy-three acres were transferred to reserved forests, 150 acres were excluded at settlement, and 620 acres notified as reserved lands under Section 26 were cancelled by the Collector of Cuddapah (North). The balance remaining at the close of the year was 75 square miles including the leased forests.

2. Forest Settlement.

2. Of the areas that remained to be constituted at the beginning of the year, six small additions (73 acres) which formed enclosures or additions within the existing reserved forests in *Anantapur* and *Chittoor* were finally settled, and the settlement of five blocks (12 square miles) completed leaving incomplete three blocks in *Bellary*, *Anantapur* and *Chittoor* and two enclosures in *Chingleput* all less than a square mile in extent. The initial notification for addition to Utukur Varini block was cancelled after the close of the year.

3. Demarcation.

3. Sixteen miles of external demarcation were carried out in *Anantapur*, *East Cuddapah*, and *Chittoor* at a cost of Rs. 121 or at an average rate of Rs. 7-9-0 per mile. Re-clearing, repairing and re-building cairns with stone slabs and putting up notice boards as required by Board's Proceedings Forest No. 1175, Mis., dated 5th August 1912, were also undertaken in these and other districts.

Permanent demarcation of reserves in the Circle is capable of much improvement and the matter is receiving attention.

4. Forest Surveys.

(a) By Survey of India.

4. The Survey of India Party did not work in this Circle during the year.

(b) By Departmental Surveys.

5. Under departmental surveys the work done by specially employed surveyors consisted chiefly in checking and verifying boundaries of existing reserves and in surveying coupes to be leased out.

CHAPTER II.—MANAGEMENT OF STATE FORESTS.

1. Regulation of Management.

(a) *Preparation and Control of Working Plans.*

6. *Preparation.*—In *Nellore*, the working plan for the Kottapatam Reserved Forests was sanctioned by the Board and that for Tammenapatam Extension Casuarina plantations was returned in view of the recent policy of Government in regard to Casuarina plantations. The working plan for Nellore range was received after close of the year.

In *Chittoor*, a preliminary working plan for the forests in the Vayalpad and Madanapalle ranges was sanctioned in part pending the orders of Government on the proposals of the Forest Committee.

In *East Cuddapah*, a preliminary working plan for the Palakonda Timber Working Circles which was submitted to Board was withdrawn owing to a change in the system of working timber areas.

A draft working plan received from *North Cuddapah* had to be returned for the same reasons.

7. *Control.*—Control is improving but much still remains to be done, and many of the existing working plans need thorough revision.

The principal deviations were :—

In *Bellary*, cultural operations were not undertaken on a large scale in Adōni, Alur and Bellary ranges as the operations of the previous years proved a total failure. In Harpanahalli range, formation of inspection paths and cultural operations were not completed owing to arrears of previous years works and the fellings prescribed were not carried out as there was no demand.

In *Anantapur*, regeneration works were given up as useless.

In *North Cuddapah*, some coupes were not worked for want of demand and owing to non-completion of previous year's coupes.

In *East Cuddapah*, several coupes were not worked on account of arrear coupes that remained to be felled from previous years. The system of working timber areas has been altered and small areas will be treated under the improvement felling system in future. Working of Sidhout series was suspended for three years. Existing working plans laid down provisions which have proved impossible to carry out in practice under present circumstances. Hence the necessity for change of system.

In *Chingleput*, some coupes were not sold for want of offers.

Generally, the revision of working plans is held in abeyance pending receipt of orders of Government on the proposals of the Forest Committee.

(b) *Annual Plan of Operations.*

8. The sanctioned plan was generally adhered to ; the chief deviations were the following :—

In *Bellary*, the reconstruction of subordinates' lines near Adōni was not undertaken owing to delay in the acquisition of the site ; inspection paths in Alur range were not constructed pending orders of Government on the question of abandonment of the reserves concerned. In Harpanahalli range the construction of an inspection path and out-houses for Range office, and cultural operations were not carried out.

In *Guntūr*, the Range office and quarters at Macherla had to be postponed and wells were not constructed pending orders of Government on the Forest Committee's report.

In *North Cuddapah*, certain coupes were not sold for want of demand ; road and building works were postponed for want of adequate staff. Minor produce was worked departmentally owing to very low bids obtained at auction sales.

In *East Cuddapah*, minor produce was not sold on account of very low offers at auction sales.

2. Communications and Buildings.

In *Nellore*, the construction of range camp sheds in three places was given up as unnecessary, and the combined range office and quarters at Kavali and compound wall to the range office at Kanigiri were postponed. In their place the range office at Dachur was taken up, being deemed more urgent.

In *Chittoor*, the repairs of certain roads were postponed to provide funds for more urgent works.

9. The outlay on communications and buildings is compared below :—

	1911-12.	1912-13.
	RS.	RS.
Roads and bridges	4,473	14,271
Buildings	53,534	51,816
Other works	7,845	3,897

The increase was only under Roads and Bridges mainly in *Bellary*, *Anantapur* and *North* and *East Cuddapah* The increased expenditure on roads is satisfactory and a great deal remains to be done in the future if the forests of the circle are to be properly opened out for working.

The important works were—

(*a*) *Roads and Bridges.*

10. In *Bellary*, formation of an inspection path in Harpanahalli range and a cart-track from Copper Mountains Bungalow to Siddapuram.

In *Anantapur*, roads from Amagondapalayam to Vanavole 3 miles and from Bukkapatnam to Siddarampuram 9 miles were constructed.

In *North Cuddapah*, some bridle paths and cart tracks were constructed.

In *East Cuddapah*, opening of bridle paths from Mogilipenta to Papanasam 5 miles and from Erranetibundalu to Papanasam and 2 cart tracks in Thummalabylu.

In *Chittoor*, construction of Erravaripalem Nerabylu Road—4 miles and repair of a cart track from Nellipatla to Kolamasanapally 6½ miles and road from Nellipatla rest house to reserved forest 1½ miles.

Tramways.—In Sriharikota 8,749 tons and in Coast range 5,257 tons of fuel were trammed against 5,660 and 4,752 tons respectively in the previous year.

(*b*) *Buildings.*

11. In *Bellary*, construction of inspection bungalows at Antapuram and Gudikota are still in progress and combined range office and quarters at Harpanahalli and Hospet were completed, subordinates' lines in Adōni range remain incomplete.

In *Anantapur*, construction of bungalows at Nagasamudram and Ramagiri were completed and those at Marutla and Siddarampuram commenced.

In *Guntūr*, construction of Venkatayapalem bungalow and a camp shed at Gavinivaripalem are in progress.

In *North Cuddapah*, construction of rest-house at Chinnaletibhavi and out-houses to Bynapalle and Idupulapaya bungalows was completed.

In *East Cuddapah*, construction of a rest-house at Obalum was completed; subordinates' lines in Kodur and Rajampet ranges are in progress.

In *Nellore*, rest-house at Gonupalle and out-houses to Kothachenu rest house and subordinates' lines at Kothachenu were completed. Good progress was also made in the construction of Range officer's quarters and subordinates' quarters at Kothachenu and range quarters at Kanigiri.

In *Chingleput*, the extension of Kambakkam Hill bungalow was completed.

In *Chittoor*, the rest-house at Panapakkam was completed. Construction of quarters for a Deputy Ranger at Mamandur is in progress. The Chittoor range office was also improved.

The progress in buildings is satisfactory but much still remains to be done. Without roads and proper buildings in the way of subordinates' lines and rest houses, the proper inspection, protection, and working of the forests is almost impossible. Expenditure sensibly invested on such works within the Circle will well repay itself in a few years time. Having due regard to progress and improved efficiency of working it is not possible to advocate any serious curtailment of expenditure at present under either of these important heads.

(c) *Miscellaneous.*

12. New wells were sunk and old wells repaired in all districts.

Construction of rubble dams and deepening of salt creeks for the transport of fuel were done in *Guntūr.*

In *Anantapur* about 30 miles of stone walls around closed compartments were constructed.

In *Chingleput* nearly half the total length of the Guindy Park Reserve was fenced with substantial stone pillars placed at intervals of 20 feet with 5 strands of galvanized wire.

3. Protection of Forests.

(a) *General Protection.*

13. The following statement shows the number and classification of forest offences compared with the previous year :—

Class.	Injury to forests by fire.		Unauthorised felling or appropriation of wood and minor forest produce.		Grazing without permission or in tracts in which grazing is prohibited.		Other offences.		Total	
	1911-12.	1912-13.	1911-12.	1912-13.	1911-12.	1912-13.	1911-12.	1912-13.	1911-12.	1912-13.
1. Cases taken into court.	9	11	1,025	1,071	683	766	61	82	1,778	1,930
2. Cases compounded	20	5	4,109	4,314	2,547	2,834	131	189	6,807	7,342
3. Cases undetected ..	298	267	187	176	320	122	2	1	807	566
Total ..	327	283	5,321	5,561	3,550	3,722	194	272	9,392	9,838

There is a small increase under all heads except fires. The decrease in fires is chiefly in *Chittoor* and is reported to be due to closure of certain reserves to grazing on account of heavy fires last year. Under "Unauthorized felling" there was a fall chiefly in *Nellore* and *Chittoor* which is attributed to favourable season, but it was counterbalanced by an increase in *Bellary* stated to be due to better supervision and in *East Cuddapah* due to formation of two additional ranges resulting in closer supervision and partly due to the presence of the Vernacular Training school for five months in the year, the students of which detected 26 cases. The increase in *Chingleput* is reported to be due to preparation of separate offence reports for each individual where more than one offender was apprehended in one place and at one time. The increase under grazing occurred in all the districts except *Anantapur Nellore* and *Chittoor* where the decrease is attributed to favourable season.

Of 2,069 cases taken to court, 1,769 were convicted and 300 acquitted against 1,649 and 301, respectively.

The percentage of failure is 14·50 against 15·37 of last year.

14. *Cases compounded.*—Six thousand six hundred and fifty-three cases were compounded for Rs. 66,515 against 5,976 cases for Rs. 53,029 last year. The average amount per case is slightly higher than that of last year. The punishments awarded by the Magistrate are reported to be adequate. A case of some importance occurred in *East Cuddapah* in which 1,000 goats were seized while browsing. When the goats were being driven to cattle pound they were rescued and the forest subordinates severely assaulted and the accused persons were convicted by the Deputy Magistrate

and an appeal is now pending with the Sessions Judge. Rewards were sparingly granted in all the districts except *Bellary* and *Chingleput.*

15. *Rules for the guidance of Forest officers in compounding offences.*

A precis of the district reports is appended below: -

Bellary.—The rules laid down in G.O. No. 1990, Revenue, dated 13th June 1910, have been followed. The District Forest Officer is of opinion that the maximum fee fixed is low.

Anantapur.—The rules have worked satisfactorily, but no real improvement in conservancy can be expected until the underpaid subordinates are replaced by a properly organized permanent staff on pay commensurate with their temptations, etc.

Guntūr.—The working of the new rules has been satisfactory. The maximum fines were seldom or ever inflicted.

North Cuddapah.—The rules have been carefully followed and in no case was the maximum limit exceeded.

Nellore.—The orders regarding maximum rate were attended to.

Chingleput.—The orders had no particular effect during the year as the rates fixed are at least as high as those usually levied before the introduction of the order.

Chittoor.—The rules were followed and are reported to have worked fairly satisfactorily.

(*b*) *Protection from Fire.*

16. The system of fire protection was the same as in previous years.

Special protection.—The area attempted to be protected during the year was 1,908 square miles against 1,866 in the previous year and the area burnt was 121 square miles against 191 square miles in the previous year.

The area successfully protected was 1,787 square miles against 1,675 square miles in the previous year. The percentage of area protected rose from 89·7 to 93·6 during the year.

The cost per square mile of successfully protected area rose from Rs. 12-6-0 to Rs. 14-7-5 and the increase is due to additional area attempted to be protected and to the widening of fire lines at an increased cost both in *North* and *East Cuddapah* divisions.

The origin of fires is given in Appendix D.

The system of burning large areas of forests in strips of varying width in order to secure protection to the remainder was discontinued both in *North* and *East Cuddapah*, and it is not proposed to resort to it again.

(*c*) *Protection from Cattle.*

17. The area closed and open to grazing is shown in statement 73 which shows that 5,493 square miles were closed to goats.

An analysis of the cattle impounded during the year with the average of the three years is given in Appendix E.

The increase in *Bellary* is stated to be due to better supervision and in *Nellore*, to stricter protection of the closed areas.

(*d*) *Protection against injuries from natural causes.*

18. *Lantana.*—The encroachment of lantana in Ramandrug in *Bellary* district and Horsleykonda in *Chittoor* continues to receive attention. In *Guntūr* casuarina saplings were uprooted and washed away by erosion of sea in the Sooryalanka plantation and several plants died on account of hot weather. These plants were replaced. In Sattenapalle range, Yepi (*Hardwickia binata*) trees were attacked by caterpillars during the rainy season and considerable damage was done to the leaves but the trees recovered subsequently.

4. Sylviculture.

(a) *Natural reproduction.*

19. In *Bellary*, seedling reproduction of Red Sanders (*Pterocarpus santalinus*), *Bassia longifolia*, *Ixora parviflora*, *Diospyros Chloroxylon*, *Cassia Fistula* and *Dolichandrone crispa* was fair in some reserves. Sandal is spreading in Ramandrug. The coppice growth in felled coupes was very satisfactory. In some reserves natural reproduction of *Melia indica*, *Chloroxylon Swietenia* and *Dolichandrone crispa* was fair. In *Anantapur*, natural reproduction was good in places where there was shade. The reproduction of *Hardwickia binata* was good in the grassy open areas of Muchukota reserve and of *Melia indica* wherever thorny shrub protected it against grazing. In *Guntūr*, owing to heavy grazing regeneration is bad, but coppice was good in the babul working circle and fair in most of the areas felled. Reproduction of Mada (*Avicennia officinalis*) by seed was good in the Mangrove swamps. Natural reproduction of Red Sanders both from seed and coppice was excellent both in *North and East Cuddapah* divisions as in last year. In the former, coppice growth of Red Sanders is said to be very vigorous and seedlings of one year old in a felled fuel coupe measured on an average 7 feet. In *East Cuddapah*, seedling reproduction of *Chloroxylon Swietenia*, *Anogeissus latifolia*, *Terminalia tomentosa*, *Dolichandrone crispa*, *Hardwickia binata*, *Eugenia alternifolia*, *Shorea* and *Acacia Sundra* was satisfactory. In *Nellore*, regeneration both from seed and coppice was good in all the felled coupes and along natural streams. In *Chingleput*, reproduction from coppice was fair in all the closed coupes and natural seedlings of Red Sanders, Shorea Tumbuggaia and other species are found on the plateaus and slopes of hill reserves. In *Chittoor*, natural reproduction by seed was not very successful but was satisfactory in closed areas and in places where there was shade. Sandalwood seeded well but the seedlings either died back or were destroyed by cattle. Reproduction by coppice has been very good in all the recently felled coupes. Natural reproduction of *Pterocarpus Marsupium* and *santalinus*, *Dalbergia latifolia* was satisfactory.

(b) *Artificial reproduction.*

20. Form 75 shows the areas under plantations and topes, or subject to cultural operations. It has been decided that the casuarina plantations belonging to the department shall be sold and made over to private agency. Steps are now being taken to carry out this order. It will be necessary however to proceed cautiously so that Government may realise as near the full value of the plantations as possible.

Regular plantations.—In *Bellary*, the Moka plantation was extended by 89 acres but owing to failure of water in wells, only 18 acres were maintained. Seedlings of *Dalbergia Sissoo* and *Albizzia Lebbek* and cuttings of the former were planted and casualities in the previous year's planting supplied by cuttings of Sissoo. In *Guntūr*, 549 acres were planted with casuarina with an admixture of broad leaved species especially of Sissoo. In *North Cuddapah* and *Chingleput* nothing was done excepting watering the existing plants while in *East Cuddapah* 50 acres were sown with sandalwood seeds and subordinates dibbled seeds in several small areas.

Cultural operations.—A certain amount of these were carried out, but it has been decided to curtail such operations to a minimum in future. The results hitherto obtained are not at all commensurate with the expenditure incurred, and such experiments will, for the future, be limited to very small areas to which almost absolute protection can be afforded. Prospects of sandalwood extension are good both in *Chittoor* and *Anantapur* districts. In *Bellary*, very good results were obtained by heavy ploughing and levelling black cotton soil and various kinds of seeds were sown in furrowed lines 6′ and 18′ apart. Mound sowings were continued and only part of the area sown with different species of seeds and the seedlings are doing well. In *Anantapur* sandal was dibbled in two compartments and *Melia indica* and *Albizzia Lebbek* were regenerated on the trench and mound system and so far seedlings have come out successfully and are 15 to 18″ high. In *Guntūr* seeds of babul, *Melia indica* and *Cassia auriculata* were sown in the felled areas of the Guntūr Babul Working Circle but only babul germinated. *Hardwickia binata*, *Albizzia amara*, etc., seeds were sown in various coupes. They germinated freely but died subsequently owing to drought. In *North* and *East Cuddapah*, the operation was a thorough failure

on account of the severe drought, the method being mound sowing and dibbling. In *Chingleput*, 1,376 acres in felled coupes and in poorly stocked areas are said to have been ploughed and seeds of various species were either sown or dibbled in holes under bushes. The results of the previous year's sowings are not very encouraging. Mound sowings were carried out in the abandoned fields of a reserve, but the results are not yet apparent. In *Chittoor*, the season was a very trying one and only a fair proportion of the plants put on mounds have survived. Sandal seeds dibbled experimentally in Palmanēr range are said to be promising.

(*c*) *Operations for the Improvement of the Growing Stock.*

21. *Improvement fellings.*—In *East Cuddapah* three coupes have been marked out for improvement fellings in Seshachellams under a change of system sanctioned in Board's Proceedings, Forest Mis. No. 641, dated 6th June 1913.

In *Chittoor* improvement fellings in timber coupes of Mamandur and Chamala were undertaken and efforts made to check the spread of the growth of *Dalbergia paniculata*. With regard to these improvement fellings enquiry is now being made, as if they are similar to what has been going on in the neighbouring district of Cuddapah, a change of system is certainly called for.

Thinnings.—In *Nellore* 6,700 casuarina trees planted as nurses in 1906 and 1907 for the broad leaved species in 50 acres of the Kollurpad plantation were removed.

Creeper cutting is reported to have been carried out in almost all the districts of the Circle; and prickly-pear in *East Cuddapah* and in the Guindy Park and Meyyur plantation of *Chingleput* was removed.

Fencing.—In *Bellary* fencing was done in Adōni and Alūr ranges and existing fences repaired in Bellary range and milk hedge (*Euphorbia Tirucalli*) was planted in Harpanahalli range.

In *Anantapur* stone-walling closed compartments has been carried out.

In *Chittoor* fencing with thorns was done to protect the seedlings and coppice shoots from cattle.

In *Nellore* the fencing of old coupes was done departmentally and of new coupes by contractors.

Bunding of streams.—This apparently was done in Bellary, Adōni, Alūr, Hospet and Rayadrug ranges but majority of the bunds have been washed away. This is because the operations were not conducted properly under sensible supervision and the bunds were constructed low down the streams instead of commencing at the very source as ordered. In *Chittoor* the bunding of streams in reserves was continued in Palmaner and Chittoor reserves.

(*d*) *Experiments on Species.*

22. *Sandal.*—In *East Cuddapah* seeds were sown in some areas and in others dibbled but they have not germinated yet.

Swietenia Mahogani.—In *East Cuddapah* and *Nellore* the old plants are reported to be doing well, while those in Whiteside's Garden and Chittoor reserves are reported to be not promising.

Swietenia Macrophylla.—In *East Cuddapah* and *Nellore* the old plants are said to be healthy and luxuriant.

Acacia auriculiformis.—Twenty-three plants in *North Cuddapah* are thriving. In *Nellore*, this species does very well when mixed with casuarina in the poor sandy soil of Sriharikōta.

Eucalyptus Globulus.—In *Chittoor*, the trees in the Palmaner range are said to be thriving fairly well but the growth of those in *North Cuddapah* are not satisfactory. This tree is not at all likely to do well in either of these districts. In *Nellore*, *E. rostrata* and five other species raised from seed in 1910 in Kollurpad plantation are said to be establishing themselves.

Catalapa Speciosa.—The seven plants referred to in last year's report as surviving in Moka plantation, in *Bellary*, died.

Sesbania aculeata.—Experiments with this have now been stopped.

5. Exploitation.

(a) System of Management.

(i) *Major Forest Produce.*

23. The various sylvicultural systems in force in each district are given in the subjoined table :—

—	Bellary.	Anantapur.	Guntūr.	North Cuddapah.	East Cuddapah.	Nellore.	Chingleput.	Chittoor.	Total.	Percentage of total area under each sylvicultural system
	SQ. M.	SQ. M.	SQ. M.	SQ. M.	SQ. M.	SQ. M.	SQ. M.	SQ. M.	SQ. M.	
1. Method of clear felling by compartments	22	..	1	..	..	9	..	..	32	3·0
2. Uniform method	..	..	..	..	..	..	..	..	..	..
3. Group method ..	..	..	..	..	..	..	..	..	..	
4. Selection method	..	..	1	50	228	..	..	..	279	25·9
5. Simple coppice	9	..	2	..	..	..	..	..	11	1·0
6. Coppice with standards.	12 (a) 216	131	2	87	109	186	3	2	748	69·3
7. Method of improvement fellings	.	7	..	..	..	(a) 1	..	1	9	·8
Total ..	259	138	6	137	337	196	3	3	1,079	100·0

(a) Included in the forests for which working-plans have been prepared but not subjected to any definite system of working.

It is thus clear that the coppice with standards is the principle method of working in this Circle.

(ii) *Minor Forest Produce.*

(1) *Miscellaneous Produce.*

24. Minor produce was generally leased out in all districts except in some reserves in *North* and *East Cuddapah* where the offer was very low and one range in *Nellore* and *Chittoor*.

Permits continued to be issued for stone, earth and road materials.

(2) *Extraction of Fodder.*

25. In *Bellary* Mr. Howes cut and removed 100 tons of grass and the Military Department 839 tons during the year. In *Guntūr* the grass was leased out in some reserves and permits issued in others.

In *North Cuddapah* the grass was leased out in some reserves.

26. *Free removal of grass* —Complete information was not furnished under this head in spite of attention drawn to orders on the subject.

In *Bellary* free removal of grass was allowed in closed portions where the grass was unmarketable. The areas thrown open are 47,290 acres, but there is no record of the quantity so removed. In Harpanahalli range there were three cases of abuse two of which were compounded and the accused in the other was warned. In others the grass was sold on permits or leased out.

In *Anantapur* free removal of grass was allowed in all the reserves except those under cultural operations and the concession was withdrawn in the case of two villages where the people did not assist the Department when a fire broke out. Five hundred tons of grass are reported to have been removed.

In *North Cuddapah* free removal of fodder and thatch grass was permitted in several reserves and 2,500 cart-loads of grass were removed.

In *East Cuddapah* free removal was allowed in all the reserves except where hay operations were undertaken. Seven thousand tons of grass are reported to have been removed free. This can only be a very rough estimate.

In *Nellore and Chingleput* no free removal was allowed as there was no demand.

In *Chittoor* removal of grass in head-loads was allowed as usual.

(3) *Hay-making.*

27. The Departmental operations ordered in Government Order No. 1377, Revenue, dated 7th May 1912, are being conducted in *Guntūr* and *East Cuddapah.* In the former, 223 tons were made and the quantity sold was 300 tons including the stock of previous years. In the latter about 232 tons were made and 192 tons were sold. Report will be submitted in due course.

(4) *Grazing.*

28. The revenue realized during the year was Rs. 2,60,729 against Rs. 2,49,836 of the previous year.

There was decrease in *North* and *East Cuddapah* and *Chittoor* and increase in other districts.

The decrease is attributed to closure of larger areas this year, to non-advent of foreign cattle, to reduction of areas for goat browsing and to unfavourable season.

The increase in *Guntūr* and *Nellore* was due to large areas open to grazing and also under the Kancha system in the latter district, and in *Bellary* and *Chingleput* to favourable season. No explanation has been given for *Anantapur.*

(*b*) Agency of Exploitation.

29. Departmental agency has been abolished in all the districts except in very few reserves of *North* and *East Cuddapah* and *Chittoor.*

(i) *Departmental Agency.*

30. *Timber.*—The decrease is due to restricted fellings in *Bellary*, lack of demand in *Guntūr* and to the temporary stopping of felling Red Sanders in *Chittoor.*

Fuel.—The decrease is due to the great progress made in extending the contract system throughout the Circle.

Bamboos.—No regular departmental operations were undertaken except for building purposes in *Bellary* and *East Cuddapah.* In *Chittoor* it was leased out.

Minor produce.—The increase is due chiefly to departmental hay-making operations in *Guntūr* and *East Cuddapah.*

(ii) *By purchasers.*

31. (*a*) *Timber.*—The increase is due to large sale of trees on darkhast lands.
(*b*) *Fuel.*—The increase is due to extension of contract system.
(*c*) *Bamboos.*—The increase is due to the same cause.

Minor produce.—The increase is due to keen competition among tangedu bark (*Acacia auriculata*) contractors.

(iii) *Rights and privileges.*

32. The only right allowed was the grazing of 804 cows in *East Cuddapah.*

The free removal of grass was allowed in *Bellary*, *Anantapur*, *North* and *East Cuddapah* and *Chittoor* as usual. The value of the produce so removed was not furnished by any of the Collectors.

(iv) *Free grants.*

33. The statement below gives particulars of free grants which were made chiefly to ryots for rebuilding houses destroyed by fire. In *Nellore*, palmyra trees and leaves, etc., were granted for the construction of houses to criminal class at Kalichedu and Kavali settlements.—

—	Timber.		Fuel.		Bamboos.		Grass and grazing.	Other minor produce.	Total value.
	C.ft.	Value.	C.ft.	Value.	No.	Value.	Value.	Value.	
		RS.		RS.		RS.	RS.	RS.	RS.
Right holders	..	..	..	..	..	..	151	..	151
Free grantees	58,117	4,451	20	1	24,950	345	1,327	509	6,633
Total ..	58,117	4,451	20	1	24,950	345	1,478	509	6,784

(c) OUTTURN AND SOURCES OF FOREST PRODUCE.

34. The following abstract gives the total outturn as compared with the previous year. The variations have been already explained.

Agency of exploitation.	Timber in cubic feet including sandal-wood.		Fuel in cubic feet.		Bamboos in numbers.		Minor produce (including grass and grazing) gross value in rupees.	
	1911-12.	1912-13.	1911-12	1912-13.	1911-12.	1912-13.	1911-12.	1912-13.
1	2	3	4	5	6	7	8	9
							RS.	RS.
By Government agency ..	87,769	67,011	3,518,918	1,417,886	213,926	88,338	11,934	18,036
By purchasers (including confiscation).	1,054,247	1,396,145	1,549,646	4,208,548	1,530,595	1,683,367	6,68,445	9,41,935
By right holders	..	..	..	..	..	..	110	151
By free grantees	57,715	58,117	41,568	20	24,760	24,950	372	1,836
Total ..	1,199,731	1,521,273	5,110,132	5,626,454	1,769,281	1,796,655	6,80,861	9,61,958

The above figures are sufficient proof that the policy of extending exploitation of the forest by the agency of purchasers is being steadily persevered with.

The rates of grazing fees levied in several districts are shown in Form 74. The number of animals licensed to grazing on payment was 1,542,799 against 1,490,768.

CHAPTER III.—FINANCIAL RESULTS.

35. The financial results of the year compared with those of last year and with the previous quinquennial average show a net decrease of Rs. 1,10,154 and Rs. 1,79,130, respectively.—

---	1912-13.	1911-12.	Average of preceding five years.
	RS.	RS.	RS.
Revenue	10,20,163	12,26,569	11,46,168
Expenditure.			
A. Conservancy and works including Refunds.	3,77,090	4,79,178	4,76,504
B. Establishments	3,67,743	3,61,907	2,15,204
Total of A and B ..	7,44,833	8,41,085	6,91,708
Net Results ..	+ 2,75,330	+ 3,85,484	+ 4,54,460

The gross receipts are respectively Rs. 2,06,406 and Rs. 1,26,005 less than the previous year and the quinquennial average.

The net results show a surplus of Rs. 2,75,330 or 28·5 per cent. less when compared with that of last year. This is largely due to the change of system from departmental to contract working.

About 39 per cent. of the expenditure was devoted to the upkeep and improvement of the forests and 61 per cent. to exploitation, etc. It will be observed from Form 79 that the value of timber and other produce at sale depots at the close of the year amounted to Rs. 8,156 which is less than the previous year by Rs. 24,427 on account of the abolition of the departmental depots. The outstanding revenue at the beginning of the year was Rs. 2,31,428 and Rs. 5,32,919, at the close of the year. Of the latter Rs. 5,21,834 represents lease amounts falling due after the close of the year.

The important variations under the several heads are explained below :—

RECEIPTS.

(i) *By departmental Agency.*

Timber.—Rs. 30,866. The decrease occurred in all the districts and was due chiefly to the discontinuance of departmental operations in *North Cuddapah* and to the sale of the standing growth of 8 timber coupes on contract, which Mr. Daly the then District Forest officer took upon himself to sell in spite of the Conservator's disapproval of the system. Mr. Daly's conduct in this matter is now under enquiry. In *East Cuddapah* the decrease was due to the extraction and sale of miscellaneous timbers instead of Red Sanders alone as in previous years and in *Chittoor* to the temporary stoppage of marking red-wood trees in Mamandur Reserve for felling.

Fuel.—Rs. 2,21,134. Due chiefly to the introduction of contract system throughout the Circle.

Bamboos.—Rs. 2,610. Decrease due to the similar cause explained under "fuel".

Sandalwood. + Rs. 3,940. Realized in *Bellary* for the first time.

Minor Forest Produce. + Rs. 9,761. Due in *North Cuddapah* to departmental collection of minor forest produce to avert loss on account of very low bids obtained in auction; in *East Cuddapah*, to the sale of a large quantity of hay; in *Nellore* to increased collections.

(ii) *By purchasers.*

Timber. +Rs. 8,424. Due to increased revenue from value of trees on darkhast lands chiefly in *Bellary, Chingleput and Chittoor.*

Fuel. +Rs. 21,761. Due to the development made in replacing departmental working by contract agency in all districts. In *North Cuddapah* there was a deficit as some of the coupes were not sold for want of demand.

Bamboos.—Rs. 4,428. Decrease occurred chiefly in *Bellary* and *North Cuddapah* and is due to the payment of full lease amounts due for 1912-13 in the previous year.

Grazing. + Rs. 10,893. The increase occurred in all the districts except *North* and *East Cuddapah* and *Chittoor.* This has been explained in Chapter II.

Minor Forest Produce.—Rs. 14,713. Decrease due to the collection of only 3 Tangedu bark kists as against 5 in the previous year in *Bellary*, to the discontinuance of the sale of Rela (*Cassia Fistula*) bark in *Anantapur*, and to the stopping of minor forest produce leases for *Tuki* (*Diospyros Ebenum*) and Manure leaves in *East Cuddapah.* But this was partly made good by increase in *Nellore* from increased revenue from mica and tangedu bark (*Acacia auriculata*).

(iii) *Miscellaneous including confiscated drift and waif wood.*

Revenue. + Rs. 12,566.—This is a fluctuating item and the increase does not call for any detailed explanation.

EXPENDITURE.

A.—Conservancy and works.

The expenditure fell short of the previous year by Rs. 1,03,213 and was chiefly due to the discontinuance of departmental fuel operations and to the curtailment of expenditure on cultural operations in *Bellary* and *Anantapur.* The decrease was however partly counterbalanced by increased expenditure on hay operations and heavy programme of road works and acquisition of enclosures within reserves.

B.—Establishments.

The increase of Rs. 5,836 is due to the time scale of pay of Imperial and Provincial officers, to increased establishment sanctioned for the District Forest office, *Chittoor*, and to the charges incurred for the Vernacular Training school

CHAPTER IV.—ADMINISTRATION.

36. Mr. P. M. Lushington was in charge of the Circle up to 24th February 1913 and Mr. H. B. Bryant for the remainder of the year.

37. *New Ranges.*—Sidhout and Badvel Ranges in *East Cuddapah* were divided into three Ranges, viz., Sidhout, Badvel and Porumamilla; and old Chendragiri Range in Chittoor was divided into Tirupati and Chendragiri.

38. *Conduct of the Executive establishment.*—The conduct of the executive staff was fairly satisfactory except in *North Cuddapah.* One Probationary Ranger and one Deputy Ranger were dismissed and the services of another Probationary Ranger and several Deputy Rangers were terminated for their unsatisfactory work. One Ranger was reduced to lower grade and another temporarily for bad work.

39. *Protective staff.*—The conduct of the staff continues still to be unsatisfactory. It is doubtful whether any great improvement can be expected until pay and prospects have been increased, and better organization introduced.

40. *Ministerial establishment.*—The conduct of the establishment continued on the whole to be fairly satisfactory.

41. *Health of establishment and casualties.*—The health of the establishment was bad in *North Cuddapah* where two tannadars and two watchers died of fever. Fever was prevalent in parts of *Nellore* and *Chittoor*. In the rest of the Circle the casualties were one Deputy Ranger and one watcher died.

42. *Relations between Revenue and Forest officers.*—The relations between Revenue and Forest officers continued to be cordial and no complaints have been received.

43. *Service books.*—The service books are reported to have been maintained and verified in all the districts.

44. *Conservator's inspection.*—The Conservator inspected some of the forests of all districts in the Circle except *Anantapur* and *Chingleput*, and all offices except *Anantapur.*

45. *Touring of District Forest Officers.*—All the District Forest Officers except those of *North Cuddapah* and *Nellore* spent more than six months in camp. In *North Cuddapah* just the minimum was done as the district was held by the District Forest Officer, East Cuddapah, in addition to his own district and in *Nellore* the touring fell short by only five days.

46. *Inspection of Range offices.*—All Range offices were inspected by District Forest Officers except one in *East Cuddapah* which was a newly formed Range.

47. *Audit of accounts in District Forest offices.*—The accounts of all the District Forest offices except *Bellary* and *Chingleput* were inspected by the special staff of the Accountant-General's office and results reported to be satisfactory.

48. *Imperial Forest College, Dehra Dun.*—One Probationary Ranger and four Deputy Rangers returned from the College with Ranger's Certificate and the first of these obtained Honours.

49. *Madras Forest College.*—Two Probationary Rangers and two Deputy Rangers were deputed. Of those deputed to the College last year, one Probationary Ranger was found unfit to follow the course and was removed and his services as probationary ranger were terminated; another became ill and was also removed on account of his long absence in excess of the period allowed under the rules.

50. *Vernacular Training School.*—A separate school was sanctioned for the Circle. It was located in the Balapalle forests of the *East Cuddapah* division. Three Foresters and 27 Forest Guards from *East Cuddapah*, *North Cuddapah* and *Chittoor* were deputed. Of these, one was sent back on account of ill health. Eleven Forest Guards deputed last year to Giddalur in Kurnool district returned to their duties in the Circle.

51. *Work and service of superior officers.*—The following remarks have been made by Collectors on the work of District Forest Officers :—

Bellary.—By Mr. A. F. G. Moscardi—" M.R.Ry. V. Alwar Chetty seems to be an efficient forest officer with considerable knowledge of his work and interest in it."

Guntūr.—By Mr. J. N. Roy—" Mr. Woutersz is a very keen Forest Officer and is turning out good work. Mr. Syed Abdul Khader's work too was satisfactory."

Cuddapah.—By Mr. J. F. Bryant—*North*—" I have reported elsewhere on the work of Mr. Daly. As for Mr. Whitehead I consider that he is taxed beyond what is fair. The work of two Forest districts is too heavy for him." *East*—" Mr. Whitehead's work and character were excellent. I could not wish for a better officer."

Nellore.—By Mr. T. Raghaviah—" M. R. Ry. C. M. Maduranayakam Pillai Avargal was in charge of the district throughout the year and ran it efficiently ".

Conservator's remarks.—The Acting Conservator has inspected the districts of *North Cuddapah* and *Anantapur* recently. The Forest Administration by Mr. Daly of *North Cuddapah* was very bad and the matter is under enquiry. Mr. Hodgson in *Anantapur* district has done some good useful work and deserves credit for it.

CHAPTER V.—GENERAL.

52. *Realizations of Revenue from the usufruct of toddy yielding trees on Government wastes and poramboke lands.*—The revenue realized was Rs. 57,770 against Rs. 57,750 of the previous year.

53. *Measures adopted to encourage the growth of manure-leaf-yielding plants.*—Experiments in growing *Sesbania aculeata* were continued during the year and the seeds harvested were sent to the Agricultural Department for distribution. As reported in the previous year, the experiments proved a failure. The experiments have now been put a stop to under orders.

Rules under the Forest Act.

54. *Timber Transit Rules.*—In *Guntūr* the rules are stated to have worked satisfactorily. In *Cuddapah* a special set of revised rules was submitted to Board and these have been submitted to Government in Board's Proceedings Forest No. 152, dated 26th July 1913, for sanction. The revised rules introduced in *Chittoor* are reported to have worked satisfactorily.

55. *Rules under Section 26 of the Forest Act.*—The privileges allowed under the rules were generally availed of by the people and no serious complaints or abuses were reported.

56. *Inventory of valuable stock.*—The prescribed registers have been maintained and the stock verified in all the districts.

57. *Raingauges.*—These were maintained in all the divisions except *Chingleput.* In view of the fact that the Meteorological Department has reported that the statistics obtainable from raingauges maintained by the Forest Department are utterly unreliable, it is recommended that the number of stations be considerably reduced, and gauges kept only in those places where there is a probability of a trustworthy officer taking correct readings. It is obvious that readings recorded by a guard or a watcher are not to be relied upon.

58. *Supply of Forest Produce.*—In all the districts the contract system has been introduced and is making progress. In *East Cuddapah* some coupes were worked departmentally for want of proper contractors, and the fuel collected was sold. In *Chittoor* nine fuel coupes were worked departmentally and the fuel was supplied to the Railway. The departmental depots were closed in all the districts except two in *North Cuddapah* the retention of them was considered necessary to meet the wants of the towns people. The necessity for these will now be further enquired into.

59. *Rules for the guidance of Forest officers in compounding forest offences.*—*Vide* paragraph 15 of Chapter II.

60. *Cultivation in reserved forests with a view to growing trees.*—In *Bellary* no new areas have been leased out. The plants of 1908 are 6′ to 14′ high and those of 1911-12 are 1′ to 2′ high. In the Alur Range there is a small number of plants from sowings of previous years 2′ to 3′ in height. In *East*

Cuddapah, the patta given in previous years was renewed. It is not proposed to continue these experiments further.

61. *Suits.*—In *Bellary*, a suit has been filed in the District Munsiff's Court, Bellary, by one Narasingadu claiming Survey Nos. 70-A/2 and 72 of Yerragudi and it is pending. In *Guntur* Rs. 207-11-2 out of Rs. 255-4-6 decreed in favour of Government were realized by the sale of the property and the balance written off by the Board. The suit brought by the Jagirdar of Putlampalli in *North Cuddapah* has been disposed of in favour of Government but an appeal is said to have been made to the High Court. In *Nellore* the Letters Patent appeal was dismissed without costs.

62. *Live-stock.*—*Vide* form No. 84. Government bulls were used in *Chittoor* alone for carrying fuel for supply to the Railway. The Railway contract has now closed; and steps will be taken to dispose of the bulls.

63. *Mining.*—In *Bellary* no mining lease was granted but an application received from Mr. A. Ghose is now before Government. An exploring license for a portion of the Bellary reserve, prospecting licenses for five minerals in Copper Mountains and for manganese ore were granted to Mr. A. Ghose. Applications for prospecting minerals in Joga and Hospet Reserves, Red Oxide in Joga A and B blocks and manganese ore in Thimmaragudi have been received and they are pending disposal except one which has been rejected. In *Anantapur* no additional licenses for prospecting gold were given and the area granted in Ramagiri Reserve was disafforested. In *Guntūr*, one exploring license for diamonds and precious minerals were granted to Messrs. Jamban & Co., Calcutta, in Venkatayapalem Reserve and its extensions. No stone of any commercial value has been found and the Company has applied for a prospecting license. A license to prospect corundum in Damalcheruvu in *Chittoor* was granted but no work was done by the licensee.

Nellore Mica and Mica Mines.

64. *Applications.*—Thirty-two applications were pending at the beginning of the year and 99 were received during the year. Of these 52 were disposed of and 79 remained as balance at the end of the year. A large number of these was for prospecting licenses.

Mines in Government lands (*State mines*).—There were 33 working mines at the beginning of the year and there were no relinquishments or cancellations. Two fresh mining leases were granted making a total of 35. Besides these six exploring and eight prospecting licenses were granted. Most of the mines worked well and may be considered promising.

Patta land mines (*shared mines*).—The 23 mines which remained at the close of the previous year continue to be worked. Of these the "Kubera" mine yielded the largest produce.

Mines in permanently-settled estates (*private mines*).—The 11 mines continued to be worked, and yielded 269,717 lbs. 13 oz. of mica of all classes estimated at Rs. 1,19,699. All these are in shrotriem lands. Of these Kalichedu and Pokkandala are valuable.

Illicit mining.—There was one case of illicit mining. The coolies concerned were prosecuted and punished. A prosecution has since been launched against the abettor and the judicial enquiry is still pending. In the case shown as pending last year in Government lands two persons were charged; one of them was fined and the other discharged.

Outturn and royalty.—There was a great increase in the consignments and output and of the royalty realized over the last year's figures. This is ascribed to favourable condition of the market and the steady working of the mines and Rs. 951 still remain to be realized. Besides mica, 336 lbs. of garnet and 3,263 lbs. of samaraskite were also despatched. A royalty of As. 4-6 on the former

Year.		LBS.	OZ.	RS.
1911-1912	...	688,872	*10	16,983
1912-1913	...	1,160,703	12	23,505

* Figure in the last year's report is a misprint.

and Rs. 30–9–6 on the latter was realized. The China-clay lessee who was given two years' time has not started work yet. His lease expires by November next.

Financial Results.—The revenue realized was Rs. 26,106 against Rs. 19,997 of the previous year and the expenditure was Rs. 4,256 against Rs. 4,012.

Labour.—2,092 persons were employed against 1,796 in the previous year. In spite of the increase in the number of labourers, the mine owners experience a general dearth of labour; children are not allowed to work in the mines but are employed above ground mostly in dressing mica. Similar work is done by women also.

Accidents.—There was one accident with explosives at the "Kubera" mine but it was not of a serious nature.

Ventilation and lighting in tunnels.—No improvement has occurred under this head.

Inspection by superior officers.—The District Forest Officer visited the "New lands" mine. The Divisional officers visited ten and the Collector two mines. No inspections were made either by the Inspector of Mines or the District Medical and Sanitary Officer.

Prospects of industry.—The industry shows good signs of improvement and the market has been favourable. The nine cancelled mines of M.R.Ry. Ansur Subba Nayudu have been very lately placed in the hands of a Receiver and it is hoped they will be worked in the current year.

MADRAS,
26th September 1913.

H. B. BRYANT,
Ag. Conservator of Forests, Central Circle.

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MADRAS PRESIDENCY,

SOUTHERN CIRCLE, 1912–1913.

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FOREST ADMINISTRATION REPORT OF THE SOUTHERN CIRCLE

FOR THE

FOREST YEAR ENDING 30TH JUNE 1913.

CHAPTER I.—CONSTITUTION OF STATE FORESTS.

1. Alteration in Area.

Reserved forests.—An addition of 946 acres by transfer from reserved lands and a deduction of 6 acres by disafforestation were the variations during the year. The total area of reserved forests in the circle at the end of the year was 4,413 square miles.

Reserved lands.—Four small areas aggregating 88 acres were newly constituted and 946 acres transferred to reserved forests. The area of reserved lands in the circle at the end of the year was 55 square miles.

2. Forest Settlement.

2. Two small additions in North Salem, four in Madura and sixteen in Tinnevelly *cum* Rāmnād were finally settled during the year. Four small additions aggregating 88 acres were brought under settlement. The balance under settlement was 20 blocks, but the actual settlement of 7 of these was completed.

3. Demarcation.

3. One hundred and eleven miles of permanent demarcation was carried out during the year at a cost of Rs. 4,673. The progress was chiefly in Madura, where the total expenditure was Rs. 4,653 against Rs. 3,896 in the previous year. The demarcation of reserves of Tandigudy range as per revised boundary description is still in progress. During the year, revised notifications for five reserves in Tandigudy range (Kokkuparai, Kanienkadu, Siruvathukadu, Pambukallar and Maruthanathiar) and one reserve in Kodaikānal range (Muliyar) have been prepared by the Special Deputy Collector. Sanction has been obtained for the retention of the services of this special officer for a further period of two years for the investigation of twelve reserves in Kodaikānal range. A sum of Rs. 205 was spent on preliminary demarcation of proposed reserves. In North Vellore and South Arcot Rs. 293 was spent on rectification of defects in boundaries. Six hundred and fifty miles of boundaries were repaired at a cost of Rs. 1,554 and 6,821 miles were re-cleared by subordinates free of cost. Three hundred and thirty-eight miles remained to be demarcated at the end of the year, of which 320 miles are in Madura.

4. Forest Surveys.

4. No work was undertaken by the Survey of India Party during the year. In North Salem, two surveyors were employed in demarcating fuel coupes, aligning roads and revising the estimate of the Aiyur-Anabiddahalla road. In South Salem, a surveyor was employed in aligning roads. In Trichinopoly and South Vellore, fuel coupes were surveyed departmentally. In Madura, the services of the surveyor appointed to assist the Special Deputy Collector were retained throughout the year. One hundred and fifteen square miles remained to be surveyed and final maps remained to be prepared for 255 square miles at the close of the year.

District Forest reference and other maps referred to in section 80 of the Forest Code were maintained and posted.

CHAPTER II.—MANAGEMENT OF STATE FORESTS.

1. Regulation of Management.

(a) *Preparation and Control of Regular Working Plans.*

5. *Preparation.*—No new working-plan was sanctioned during the year. There has been, however, progress with the preparation of working-plans in *Salem North*, *South Vellore* and *South Arcot* and there should be considerable progress shown during 1913–14. Extra Assistant Conservator, Mr. J. Sadasiva Ayyar, was posted to *Salem North* for preparing working-plans. He has practically completed a working-plan for the Dharmapuri range consisting of 164½ square miles. After the close of the year Mr. Cornwell, Extra Assistant Conservator, was posted to *Vellore South*, but fell ill unfortunately, shortly after joining. In *South Salem*, a reconnaissance report for working bamboos in 12 reserves of the Chitteri hills was approved by the Conservator and a working-plan is now under preparation.

Control.—In *North and South Salem* and *South Vellore* it was found advisable to reduce the bamboo rotation from five to three years In *Trichinopoly*, working-plans prepared for padugais and the upland reserves in Kulitalai and Udaiyārpālaiyam ranges have been held in abeyance pending orders on the Forest Committee's report. In *Madura*, proposals for the revision of the prescriptions relating to timber in the working-plan for Cumbum range are under consideration.

The following were the chief deviations from the existing working-plans :—

In both *North* and *South Vellore*, several arrear coupes were not worked and a large number now remain unworked for want of demand and on account of difficulty of transport. In *South Vellore*, Board's sanction was obtained for deviations from the prescriptions of working-plans in respect of five working circles. In *South Arcot*, many of the arrear coupes were worked during the year. In *North Salem*, fellings continue to be generally behind-hand and several coupes could not be worked for want of competent contractors. In *South Salem*, work in 18 out of 30 sanctioned working circles was carried out, but fellings continue to be in arrears for want of means of transport to markets. In *Trichinopoly*, 2 fuel coupes of Namakkal and a large number of coupes of Musiri range were not sold. In the Tinnevelly babul areas, advance working continued for the supply of fuel to Palamcottah Jail.

(b) *Annual Plan of Operations.*

6. Besides the deviations mentioned in paragraph 5 *supra*, the only important deviations were—

South Vellore.—Felling timber in Mulacad was stopped as commercially it was unworkable ; it is now proposed to carry out an improvement felling and to dispose of the produce for what it will fetch. Alignment of road from Andiappanur to Singarapet was postponed in favour of connecting Vasanthapuram with the existing road from Andiappanur to Kambugudi. *South Arcot.*—Planting of casuarina was given up as the plantations were ordered to be sold. The construction of many proposed buildings was postponed pending receipt of orders on the Forest Committee's report. *North Salem.*—Construction of the road from Biligundlu to Kestur was begun. *South Salem.*—The Thammampatti rest-house not provided for was nearly completed. Construction of Subordinates' lines and rest-houses at Kottapatti, Chitlinghi and Cauvery Peak and of the road from Panamarathupatty to Tirumanur had to be postponed for want of funds.

2. Communications and Buildings.

(a) *Roads and Bridges.*

7. The total expenditure on new works amounts to Rs. 12,307 and on repairs to Rs. 23,337 as compared with Rs. 23,495 and Rs. 12,581, respectively, in the previous year. In *North Vellore*, five miles of road from Pinnathorai to Odugathur were constructed. In *South Vellore*, large amounts were spent on repairs to the existing roads which had been long neglected. In *North Salem*, Palakode-Kesarguli road, Vadugampatti-Lokur road and Karadiyur bungalow road were completed during the

year. A bridle-path to Sanniyasimalai was constructed and alignment of a bridle-path from Anchetti to Urigam was commenced. In *South Salem*, bridle-paths from Periakombai to Poosanikuli and Papireddipatti to Kombutukki were constructed. Preliminary traces were made for the opening of cart-tracks to tap several working circles in the division. In *Trichinopoly*, several rough bridle-paths aggregating 59½ miles were constructed for opening up the Kollimalais. In *Madura*, besides the maintenance of all existing roads, a road from Natham-Dindigul road to Periamalai (five miles) was constructed and the Sendurai-Pillayarnattam road was extended by 3 miles. In *Tinnevelly*, 6 miles of bridle-paths and cart-tracks were constructed during the year.

(*b*) *Buildings*.

8. During the year the total expenditure on new buildings and on repairs amounted to Rs. 45,057 and Rs. 12,585, respectively. The important new works were :—

North Vellore.—Construction of Range office and quarters at Odugathur. *South Vellore.*—Completion of Thanipady rest-house and construction of a rest-house and out-houses at Shenbagatope. *South Arcot.*—Completion of Shanikulam rest-house and of Subordinates' quarters in Arasampattu, Takarai North and Palankur beats. *North Salem.*—Completion of rest-houses at Medugampalli and Karadiyur and part construction of rest-houses and out-houses at Jowlagiri, Hogankal and Anchetti. *South Salem.*—Completion of Ranger's and Subordinates' quarters at Papireddipatti and part construction of rest-houses at Thammampatti and Papireddipatti. *Trichinopoly.*—Part construction of a bungalow and out-houses at Kulivalavu on the Kollimalais. *Madura.*—Completion of rest-house with out-house at Pillayarnattam and of Subordinates' lines at Alampatti, Vembady shola and Rajadani and part construction of a rest-house at Ayalur and of Subordinates' lines at Kombai, Gullappagoundenpatti, Kottur, Kavunji and Pambar Hill. *Tinnevelly.*—Completion of quarters for subordinates at Mundanthorai, Pudupatti, Kannikatti and Sivasailam and of a rest-house and Deputy Ranger's quarters at Chellapulli.

(*c*) *Miscellaneous works.*

9. In *South Arcot*, Nabob's tope reserved forest was wire-fenced. In *Trichinopoly*, a dam was built to improve the water-supply at Kulivalavu. In *Tinnevelly*, the building up of the high bank of the Mundanthorai rest-house compound overlooking the Serviar which was being damaged by floods was carried out. Twenty-five new wells were sunk, several of the existing wells were deepened or repaired, and compounds fenced in several districts.

3. Protection of Forests.

(*a*) *General Protection.*

10. The following statement gives the number of offences of the year compared with the previous year :—

Class.	Injury to forests by fire.		Unauthorised felling or appropriation of wood and minor forest produce.		Grazing without permission or in the tracts in which grazing is prohibited.		Other offences.		Total cases.	
	1911-12.	1912-13.	1911-12.	1912-13.	1911-12.	1912-13.	1911-12.	1912-13.	1911-12.	1912-13.
Cases taken into court ..	25	15	1,478	1,459	543	472	121	112	2,167	2,058
Cases compounded ..	2	1	6,848	7,040	2,803	2,762	197	250	9,850	10,053
Cases undetected ..	334	241	159	160	48	50	20	8	561	459
Total ..	361	257	8,485	8,659	3,394	3,284	338	370	12,578	12,570

The total number of offences is practically the same as last year. The decrease in the number of fires reported is marked, the districts responsible being North and South Vellore. The increase under unauthorized felling was reported from South

Arcot and North Salem. The decrease under grazing is attributed to closer supervision which has resulted in an increase of Rs. 25,155 in the grazing revenue of the year. Under other offences the increase was chiefly in South Vellore.

Cases brought to trial.

Year.	Convictions.	Acquittals.	Percentage of failure.
1911-12	1,808	159	8·08
1912-13	2,043	168	7·60

The decrease in acquittals in South Arcot and North Salem is satisfactory. There was, however, a large increase in acquittals in Trichinopoly due, it is reported, to want of competent men to handle the cases in courts against professional lawyers. It is also attributed to complicity of village officers with offenders. The increase in Madura was due to the disposal of long-pending cases most of which ended in acquittal. In Tinnevelly, acquittals rose chiefly on account of certain irregularities in reporting offences and the conduct of subordinates responsible has been taken notice of.

Cases compounded.

Year.	Number of cases.	Amount.
		RS.
1911-12	9,303	82,140
1912-13	9,504	95,116

During the year under report, a larger number of cases were compounded. Attention was paid to the orders contained in G. O. No. 1990, dated 13thJune 1910, in fixing the amount of compensation. In South Vellore, the increase was due to the levying of heavy compounding fees in cases of illicit browsing. As in the previous year, systematic levying of compounding fees in accordance with the orders of Government referred to, accounted for the increase in compounding fees.

11. Punishments inflicted by Magistrates were generally satisfactory. There were no cases of importance calling for special mention.

12. A reward of Rs. 50 was granted to 5 subordinates in South Vellore division for detecting a case of illicit felling after sunset. In no other district, were rewards granted. I am of opinion that wherever protection is bad, rewards should be more frequently granted. It would certainly do good, for instance, if rewards were granted in Salem for the detection of goat-browsing in reserves.

(*b*) *Protection from fire.*

13. *Special Protection.*—There was no change in the system of protection. The area attempted to be protected was 1,148·70 square miles against 1,016·45 square miles in the previous year and the area burnt during the year was 12·81 square miles against 17·1 square miles in the previous year. Successful protection increased from 98·3 to 98·9 per cent. and the cost per square mile of successfully protected area was Rs. 13-13-4 against Rs. 13-4-5 in the previous year. Increase is due to clearing of lines in areas newly brought under special protection. In North Vellore, Malayalees in the Javadis are reported to have carried out satisfactorily their obligations in respect of prevention of fire. In North Salem, Sanniyasimalai reserve enjoyed immunity from fire for the first time for many years. The result of the experiment of giving the Malayalees certain grazing concessions provided fires were kept out is reported to be encouraging.

The results are generally satisfactory in all districts except in Tinnevelly and Madura. In Tinnevelly, it was a bad year. One thousand four hundred acres were burnt through carelessness in burning fire lines and a large area had to be closed to grazing on account of incendiarism. In Madura, the area burnt by fires entering the forests by crossing exterior fire traces rose from 1,564 to 4,831 acres. Area maliciously fired was 3,290 acres while no such firing was reported in the previous year. The origin of most of the fires reported is doubtful and satisfactory detection is seldom made. I am of opinion that liberal rewards should be granted for good work done in detection of cases of fires.

14. General protection was attempted over 2,977 square miles against 3,076 square miles in the previous year. The decrease was due to the transfer of certain reserves in North Salem and Madura to special protection. The percentage of failure slightly increased from 1 per cent. to 1·17 per cent. On the Pachamalais in Trichinopoly, general protection was carried out by the willing co-operation of the hill people.

15. The number and origin of fires are given in Appendix D. There were 250 fires burning 30,539 acres against 356 fires and 30,591 acres burnt in the previous year.

(c) Protection from cattle.

16. Eighty per cent. of the total area of reserved forests is opened to grazing of cattle but closed to goats. The area closed to all animals was 729 square miles against 654 square miles in the previous year. The increase is due to the closure of 3 specially fire-protected blocks along the Cauvery in North Salem and in Trichinopoly, to increase of area in accordance with the prescriptions of the working plans. Goat-browsing was allowed in North Vellore over 26 square miles, in North Salem over 58 square miles, and in Madura over 68 square miles only, and not 106 square miles as reported in the previous year. The areas open in North Vellore and Madura have since been reduced to 15 and 35 square miles, respectively. In Salem there has been some delay in this matter but it is hoped that by 1st July 1914 goats will be excluded from all reserved forests.

The number of cattle impounded during the year is given in Appendix E. The total number impounded was 56,642 against 56,134 in the previous year. The increase occurred in Sonth Vellore, South Arcot, North and South Salem and Trichinopoly and is generally attributed to better supervision.

The following statement furnishes the grazing incidence in each district :—

District.	Number of cattle in cow units.	Area in acres.	Number of acres per cow unit.
North Vellore	130,858	275,200	2·10
South Vellore	149,620	448,640	2·99
South Arcot	143,017	200,960	1·40
North Salem	199,125	468,480	2·35
South Salem	113,485	333,440	2·94
Trichinopoly	156,290	198,400	1·27
Madura	155,656	353,920	2·27
Tinnevelly	32,227	113,920	3·53

Note.—One buffalo = Two cows.
Two sheep = One cow.
One goat = Two cows.

The forests in all districts and especially in North Salem are still far too heavily grazed, over but this subject must remain open till orders are issued on the Forest Committee's report.

(d) Protection against injuries from natural causes.

17. *North Vellore.*—Many casuarina saplings in Vannivedu, Virinchipuram and Ammundi plantations were killed by disease. Red sanders and casuarina planted in several plantations were also badly damaged by the attack of beetles, which were hand-picked and destroyed as far as possible. *South Vellore.*—Caterpillars were found attacking the young leaves of sandal trees in Tiruppattūr range, but disappeared after some heavy showers. Specimens were collected but have not yet been identified. In Perambalur and Udaiyārpalaiyam ranges of *Trichinopoly district*, the parasite *Loranthus longiflorus* periodically affects the growth of *Albizzias* and *Melias*. *Tinnevelly.*—Steps were taken for the eradication of lantana on a small scale where necessary. It is reported that much damage is still caused to coppice reproduction of *Pterocarpus Marsupium* by Sambhur. Prickly-pear is a pest in many districts especially in Madura and North Salem. Uprooting prickly-pear is, however, far too expensive to be carried out on any large scale. No spike disease is reported from Salem.

4. Sylviculture.

(*a*) *Natural Reproduction.*

18. *North Vellore.*—Reproduction from coppice was good in all the felled coupes In the fire-protected areas closed to grazing, reproduction of *Acacias*, *Albizzia amara* and teak was successful. Teak and *Chloroxylon Swietenia* seeded profusely throughout the division, and *Hardwickia* seeding was also very good in the reserves of Ambur and Gudiyattam ranges. *South Vellore.*—Natural reproduction of *Anogeissus latifolia* on the Javadis plateau, *Hardwickia binata* in Karnataghir and *Gardenia gummifera* in dry localities near Thaniar was very good. Root-sucker system of reproduction of sandal having been found a failure is now supplemented by sowing seed in the hollows left by the uprooted trees and the results are being watched. Natural reproduction of *Albizzia odorotissima*, *Anogeissus latifolia*, *Hardwickia binata*, *Pterocarpus Marsupium*, *Santalum album*, *Shorea talura* and *Tectona grandis* by seed in the hill forests, and of *Chloroxylon Swietenia*, *Acacia sundra* and *Albizzia amara* in the plain forests was fairly satisfactory. *South Arcot.*—Regeneration by seed of *Acacias*, *Chloroxylon Swietenia* and *Melia indica* was fairly good. Reproduction by coppice shoots was generally good in all coupes. *North Salem*—Regeneration of sandal was very poor owing to the failure of south-west monsoon. An abundance of *Hardwickia* seedlings is reported along the Cauvery. Reproduction of *Melia indica*, *Albizzia Lebbek*, *Albizzia amara* and *Chloroxylon Swietenia* was satisfactory. *South Salem.*—Reproduction by seed was satisfactory in Atur, Salem East and Harur South ranges, but it was not satisfactory in Harur North range. Seedlings of sandal were found in large numbers. *Trichinopoly.*—Seedlings of *Santalum album*, *Albizzia odorotissima*, *Chloroxylon Swietenia* and *Anogeissus latifolia* were abundant in the inaccessible parts of the higher slopes of the Pachamalais. On the Kollimalais and in other parts, reproduction by seed was poor owing to the failure of the monsoon and extreme hot weather. In the felled coupes, coppice shoots were successful and in the padugais *Inga dulcis* and *Cassia Fistula* (*Konnai*) coppiced freely. Prickly-pear was found to afford valuable protection to seedlings. *Madura.*—Reproduction by seed was generally satisfactory and that by coppice in the coupes felled was also satisfactory but slow in development. *Tinnevelly.*—Reproduction from coppice was satisfactory wherever cutting was done flush with the ground, and that by seed was noticeable in the areas closed to grazing and in the shola forests. Teak seedlings are scarce but where there is loose soil and open ground they are reported to have been found in abundance. More *Hopeas* were surviving in the forest in the Tambraparani basin than was supposed. From districts where sandal exists, it is reported that the species is steadily spreading through the agency of birds.

(*b*) *Artificial Reproduction.*

Regular plantations.

19. *North Vellore.*—Very successful planting of *mahogany*, rosewood, red sanders and *Hardwickia* was carried out in Amerdi plantation. Planting of red sanders in Pichanur tope was most successful. In Arcot range, many seedlings of red sanders and *Hardwickia* planted out died from prolonged drought. *South Arcot.*—There was no planting of casuarina as the areas are to be given up. The areas planted in the previous years were watered and maintained. Two hundred and fifty graft mangoes were planted in the Sankarapuram North Bagyat tope and 100 in the Nabob's tope. In the former, 107 plants died on account of unsuitable soil and from attack of white ants and in the latter, there were several casualties due to scarcity of water. These operations were ordered to be discontinued. *North Salem.*—Blanks in 55 acres of Sanniyasimalai were planted with 9,500 basketted Cyprus plants. In another area of 62 acres in the same reserve, patch sowings of Wattle 9 feet apart were carried out. The results are being watched. *Trichinopoly.*—Ten acres were added to the existing area. Owing to the carelessness of the subordinates, a fire which occurred in the plantation and was not promptly put out destroyed 4,621 saplings. The plantations in Vengur padugais and Marudur were maintained successfully. Valuable species planted in other padugai reserves of Udaiyārpālaiyam were also maintained. *Madura.*—The growth of teak in Vannathiparai and Velan

Combai plantations was moderate. The blue gum trees in Gundanshola continue to thrive well. The pine plantation in Gundar valley extension was continued and 1,42,072 seedlings were raised and basketed. Fifty-four thousand nine hundred and thirty-nine seedlings were planted in this plantation at a uniform distance of 9 feet apart and 10,000 were put out at Vandaravu. The plants of previous years continue to come up well. In the Upper Palnis, wattle plantations have not come up satisfactorily and in one place there has been a complete failure. Arrangements have been made to dig fresh pits and plant small seedlings and root-suckers in the middle of the monsoon. *Tinnevelly.*—Banyan and *Odina Wodier* cuttings were planted in Kudiramoliteri reserve with fair success. Planting of teak in 10 acres cleared by Kanis was tolerably successful and improvement each year may be expected. Out of 3,000 nursery reared plants 1,800 are reported to be surviving. Part of the area was dibbled with seed of the same species and the result is reported to be fairly successful.

Cultural operations.

20. *North Vellore.*—Red sanders seed was dibbled in Banavaram reserve and the result was not encouraging for want of timely rain. In Panamadangi reserve, sowing of *Terminalia arjuna* was successful. Dibbling in coupes in previous years has been a total failure. *South Vellore.*—The results of sowing seeds in felled coupes were not favourable. Seeds germinated well, but many of the young seedlings were killed by drought. *South Arcot.*—As in the previous year, a good deal of attention was paid to these operations. Seeds of miscellaneous species were sown over a total area of 808 acres, but the results were not satisfactory as most of the seedlings that came up died. Two hundred and thirty-six measures of cashew seeds were dibbled over an area of 44 acres. The result in this case also was not satisfactory on account of the drought. Seeds of *Sesbania aculeata* were sown over an area of 20 acres in all the ranges for the purpose of raising seeds for supply to ryots. The operation was not successful on the whole. *North Salem.*—Seventy acres in Nagaramalai reserve were sown with sandal. The prospects of success are reported to be hopeful. *South Salem.*—The operations, as in the previous year, consisted in dibbling in of seeds in blanks in felled coupes and also in planting cuttings and sowing seeds in pits in specially-protected blocks. The results were not generally satisfactory as most of the seedlings died during the hot weather. *Trichinopoly.*—Ten and a half measures of Sesbania seeds were sown and 19 measures of seeds were harvested. Babul and *Kodukka* (*Inga dulcis*) seeds were dibbled in certain padugai coupes. The former germinated profusely while seedlings of the latter species were found only here and there. *Madura.*—Forty-four measures of Sesbania aculeata (Daincha) seed were sown in the different ranges. Four hundred and forty-three measures of seed were obtained at an average cost of As. 5–3 a measure. Three hundred and ninety-eight measures were sent to the Co-operative stores, Madura, for sale and the balance retained for departmental needs. It has been decided to continue the experiment for another year. *Tinnevelly.*—Four thousand seven hundred and nine measures of seeds of different species collected by subordinates were sown in coupes. Germination was generally fair but only a small percentage of plants survived. It is reported that *Albizzia Lebbek* does well.

(*c*) *Operations for improvement of the growing stock.*

21. In all districts, creepers and climbers affecting standards in all the felled coupes were cut and removed by subordinates. In *South Arcot and Tinnevelly*, bamboo clumps in certain reserves were thinned. In the latter district, the operation was done in the hot weather which is the wrong season, with the result that a lot of shoots which came up died. It is proposed to continue the operation in future in September. In *Trichinopoly*, thinnings of casuarina by removal of dead, dying and damaged trees were carried out in Vettangudi reserve.

(*d*) *Experiments.*

22. *Acacia auriculiformis.*—In North Vellore, the species is doing well, and the experiment will be continued. In Trichinopoly, seed was sown in Karaipakam reserve. One hundred and fifty plants were transplanted, but are not promising due most likely to unfavourable soil.

Bengal Daincha—South Arcot.—One hundred measures of seeds were sown in November 1912, but the seedlings did not survive the hot weather.

Pinus longifolia—North Salem.—Five hundred seedlings were raised, basketted and planted in Sanniyasimalai.

Dalbergia sissoo—South Arcot.—Thirteen seers of seed received from Lahore were sown in the Coast Casuarina plantations. Germination was satisfactory.

Eucalyptus—North Salem.—The plants put down at Sanniyasimalai show a growth of only about 6 feet at three years of age.

Hardwickia binata.—This species is doing very well in Ammanur reserve of North Vellore. In Tinnevelly, there are trees planted about twenty years ago at Koilteri.

Mangifera indica —One hundred and three trees are thriving in Thaniar bungalow compound in South Vellore.

Pterocarpus santalinus (Red Sanders).—This species is doing remarkably well in Palamady, Ambur and Banavaram reserves in North Vellore. In South Vellore, 110 trees are thriving in the Thaniar bungalow compound. In Salavady reserve of South Arcot, the tree continues to thrive well. Of the plants put down in previous years, 510 varying from 1 to 7 feet in height exist. Of 2,178 plants put down during the year under report, 1,900 are surviving.

Rosewood.— Introduced into Amerdy is doing remarkably well.

Swietenia macrophylla—South Vellore.—Twelve trees in Melpat bungalow compound are in good condition. *South Arcot.*—Three trees in Veppur reserve are now 19 feet in height. Two pounds of seed have been sown in certain plantations.

Swietenia Mahagoni—North Vellore.—The seedlings put down in Chenur plantation are not doing well. Out of 48 plants put down in 1904 in Arasampet bungalow compound, 25 are surviving. The species is reported to be promising in suitable localities. *South Vellore.*—Fourteen trees are in good condition in Melpat bungalow compound. *South Arcot.*—Of the trees planted in previous years, 90 are surviving, varying in height from 10 to 25 feet. One thousand seeds were sown in Salavady reserve. Forty-two only germinated and 38 seedlings survived. *North Salem.*—Five hundred seedlings planted in Sanniyasimalai reserve are not very promising. *Trichinopoly.*—The species was tried in two reserves and Sengattupatti bungalow compound. The plants are thriving. *Madura.*—The trees in front of the bathing mantapam in the Alagar Hill reserve are reproducing themselves naturally by seed and those in the compound of Kanavoipatti rest-house continue to thrive.

5. Exploitation.

(*a*) System of Management.

(*i*) *Major Forest Produce.*

23. The total area of forests under working plans is 2,706 square miles. The various sylvicultural systems in force over this area are shown in the following table :—

Sylvicultural system.	Area in square miles.	Percentage of total area under each sylvicultural system.
Clear fellings	·73	·03
Simple coppice	·41	·01
Selection fellings	504·78	18·65
Coppice with standards...	676·16	24·99
Improvement fellings	284·82	10·53
Forests for which working plans have been prepared but not subjected to any definite system of working	1,239·10	45·79
Total ...	2,706·00	100·00

(1) *Clear or Regeneration fellings and* (2) *Selection fellings.*

24. *Clear or regeneration fellings.*—In South Arcot, ten coupes of 491 acres in the Coast Casuarina plantations and one coupe of 23 acres in Tirumalavasal Casuarina plantation in Trichinopoly were clear felled by contractors.

Selection fellings.—In North Vellore and South Arcot, selection fellings were carried out in bamboo coupes. In South Vellore, selection fellings were carried out in 5 sandalwood coupes, and in North Salem, extraction of sandalwood for export to Europe and timber for supply to Remount depot was carried out. In South Salem, 17 bamboo coupes were worked by contractors and some sandalwood was extracted departmentally. In Madura, 60 first and 100 second-class trees were marked and sold to a contractor in accordance with the provisions of the working plan.

(3) & (4). *Improvement and Coppice fellings.*

25. The following coupes were felled under coppice with standards :—

Thirty-five fuel coupes in North Vellore, 42 in South Vellore, 51 of 4,059 acres in South Aroct, 53 in Trichinopoly, 28 of 2,707 acres and 16 tank beds in Madura, and 16 coupes and 12 tank beds in Tinnevelly. Under the same system some fuel coupes were worked in North and South Salem. Particulars are not given in the reports.

Coppice without standards.—Two tank beds and 5 forest coupes were worked in Tinnevelly.

Improvement fellings.—Twenty-seven bamboo coupes in South Vellore were worked under improvement fellings. Bamboo blocks in North Salem and some timber coupes in South Salem were worked under the system.

(5) *Unregulated fellings.*

26. In South Arcot and South Salem, unregulated fellings under the permit system were, as in the previous year, confined to unreserves. In North Salem, the system was stopped during the year.

Minor Forest Produce.

(1) *Miscellaneous produce.*

27. Minor forest produce was generally leased out. Permits were issued for manure leaves and stones in North and South Vellore and South Arcot and for thatch grass, stones and thorns in Madura. In South Arcot, there was a large fall in revenue on manure leaves due to the increase in the seigniorage rate. In last year's report it was stated that the sale of permits by Revenue officers for the removal of Avaram bark from the unreserves of Trichinopoly district would probably result in a large fall of revenue. It is now reported that the decrease has amounted to Rs. 10,034.

(2) *Extraction of Fodder.*

28. In North Vellore, free removal of grass from all reserves was permitted. It is difficult to estimate the value of these free removals, but it is reported that about 26,000 cartloads valued at Rs. 7,500 were removed. It is not stated how these figures were arrived at and, in my opinion, they are far too high. The concession of free removal of grass from all coupes closed to grazing was not availed of in South Arcot. From North Salem, it is reported that there is no demand for fodder. In South Salem and Trichinopoly, there were no free removals. In Madura, permits were, as usual, issued and in Tinnevelly, grass was as in previous years included in minor produce leases. No information on this point is given for South Vellore.

(3) *Hay-making.*

29. During the year, Banavaram reserve in North Vellore division was leased out to the Military Department on payment of royalty of Rs. 2 per ton on hay removed. In North Salem, 22 tons of hay was collected from the South Shevaroys and Lokur working circles at a cost of Rs. 55 and sold in auction for Rs. 82–8–0; three tons and 1,120 lb. was collected from Krishnagiri range at a cost of Rs. 12 and sold in auction for Rs. 23–8–0, and 11 tons was collected from Jowlagiri and Sanamavu reserves of Denkanikotta range at a cost of Rs. 116–11–0 and sold to the Remount Depot for Rs. 218–14–4. The net result was a profit of Rs. 141–3–4. In

South Salem, four tons and 560 lb. of hay was collected from the Harur specially protected block at a cost of Rs. 15 but a sum of Rs. 14-10-0 only was realized by sale. In Trichinopoly, a small quantity of about two cart-loads was collected from plantations and sold for Rs. 46.

(4) *Grazing.*

30. The revenue derived from grazing was Rs. 2,18,586 against Rs. 1,93,431 in the previous year, an increase of 13 per cent. The increase was chiefly in North and South Vellore, North Salem and Trichinopoly and was due to better supervision.

(b) AGENCY OF EXPLOITATION.

(i) *Departmental Agency.*

31. The contract system being generally in force the quantity of timber and fuel, the number of bamboos and the value of minor produce extracted departmentally were respectively 4·98, ·03 and ·08 per cent. of the total outturn. Transport was entirely done by country carts.

Timber — 10,761 cubic feet. Decrease was due to the stoppage of timber operations in North and South Salem divisions, pending preparation of working plans.

Fuel — 2,502,401 cubic feet due to the introduction of contract system in all the districts.

Bamboos — 195,022 due to sale of bamboo blocks to contractors.

Minor produce — Rs. 633 due to no sales of Divi Divi pods.

(ii) *By purchasers.*

32. *Timber* — 67,998 cubic feet. Due to poor sales of trees on darkhast lands in North Vellore and Tinnevelly.

Fuel — 1,204,595 cubic feet. Decrease was due chiefly to the fact that contractors failed to complete fellings in their coupes.

Bamboos — 7,939,569. Decrease was due in South Vellore and North Salem to less work by contractors and also to suspension of contracts for irregular work. In North Vellore, South Salem and Madura, removals by purchasers were low, reasons for which have not been reported.

Minor produce+Rs. 82,447.—Increase was generally due to better sales.

(iii) *Rights and privileges.*

33. The only rights allowed were for grazing at reduced rates in North and South Vellore and removal of thatch grass to the value of Rs. 80 in South Arcot. Tree-tapping is also allowed in Tinnevelly, the value being Rs. 740 against Rs. 725 in the previous year.

(iv) *Free grants.*

34. The estimated value of free grants was Rs. 16,250 against Rs. 5,341 in the previous year. The increase was chiefly due to the free removal of grass in North Vellore which is valued at Rs. 7,500 and in Trichinopoly, to the supply of a large quantity of material to the Public Works Department for rebuilding groins and korambus in the river Cauvery.

35. The quantity and estimated value of produce removed by right holders and free grantees are shown in the following abstract :—

—	Timber.		Fuel.		Bamboos.		Grass and grazing.	Other minor produce.	Total value.
	Cubic feet.	Value.	Cubic feet.	Value.	Number.	Value.	Value.	Value.	
		RS.		RS.		RS.	RS.	RS.	RS.
Right holders	..	..	20	1	..	..	..	820	821
Free grantees	32,276	4,018	104,301	1,684	26,441	232	7,965	2,351	16,250
Grants at reduced rates ..	..	..	..	.	..	..	1,793	..	1,793
Total ..	32,276	4,018	104,321	1,685	26,441	232	9,758	3,171	18,864

(c) OUTTURN AND SOURCES OF FOREST PRODUCE.

36. The total outturn is given in the following abstract :—

Agency of exploitation.	Timber including sandalwood in cubic feet.		Fuel in cubic feet.		Bamboos in number.		Minor produce including grass and grazing in rupees.	
	1911–1912.	1912–1913.	1911–1912.	1912–1913.	1911–1912.	1912–1913.	1911–1912.	1912–1913.
1	2	3	4	5	6	7	8	9
							RS.	RS.
By Government Agency.	43,296	32,535	2,856,449	354,048	199,304	4,282	1,066	433
By purchasers ..	1,051,227	983,229	7,463,960	6,259,365	20,600,461	12,660,892	4,25,424	5,07,871
By right holders ..	..	..	20	20	..	..	2,431	820
By free grantees ..	50,672	32,276	1,852	104,301	24,970	26,441	531	10,316
Total ..	1,145,195	1,048,040	10,322,281	6,717,734	20,824,735	12,691,615	4,29,452	5,19,440

The variations have already been explained. The rates for grazing fees levied in the several districts are shown in Form No. 74. The number of animals licensed on payment is 1,312,568 against 1,117,489 in the previous year.

CHAPTER III.—FINANCIAL RESULTS.

37. The revenue and expenditure of the year are compared with those of the previous year and the average of the preceding quinquennium in the following abstract :—

——	1912-13.	1911-12.	Average of preceding five years.
	RS.	RS.	RS.
Revenue	14,08,192	13,81,690	12,89,376
A. Conservancy and Works including refunds.	2,88,401	4,23,562	4,44,504
B. Establishment	3,61,052	3,50,976	2,86,232
Total Expenditure ..	6,49,453	7,74,538	7,30,736
Surplus	7,58,739	6,07,152	5,58,640

Compared with the previous year, there was an increase of Rs. 26,502 under revenue and a decrease of Rs. 1,25,085 under expenditure. Fifty-eight per cent. of the total revenue was derived from major produce, 33 per cent. from minor produce and 9 per cent. from miscellaneous sources. Of the expenditure, 42·6 per cent. was devoted to the upkeep and improvement of the forests, 14·2 per cent. to exploitation and 43·2 per cent. to miscellaneous items. The proportion of net to gross revenue increased from 43·9 to 53·9 per cent. The outstanding revenue at the close of the year was Rs. 2,74,045, of which Rs. 27,944 fell due within the year. The estimated value of timber and other produce at the sale depots at the close of the year was Rs. 29,845 against Rs. 41,144 at the commencement of the year, showing a decrease of Rs. 11,299 during the year.

The chief variations between the actuals of the year and those of the previous year are explained below :—

RECEIPTS.

(i) *By Departmental Agency.*

		RS.	
Timber	... ...	— 1,552	Due to the introduction of contract system in all the districts.
Fuel	... ...	—1,78,961	
Bamboos	... ...	— 2,931	

Sandalwood + 73,404.—Due to the extraction of a larger quantity of sandalwood and very good prices realized in local sales.

Minor produce — 338.—Calls for no remarks.

(ii) *By Purchasers.*

Timber + 21,895.—Due to the larger amount realized by sale of timber trees in Cumbum, Madura district, and small increases in other districts.

Fuel	+97,210	Due to the lease of fuel and bamboo coupes to contractors.
Bamboos	+12,154	

Grazing + 25,155.—Due to larger collections as explained in paragraph 30 *supra*.

Minor produce — 17,232.—Due to the reasons given in paragraph 27 *supra*.

(iii) *Miscellaneous (including confiscated draft and waif-wood).*

Revenue — 2,302.—Calls for no remarks.

EXPENDITURE.

A. Conservancy and Works.

The expenditure fell short of the previous year by Rs. 1,23,195 which was due chiefly to the introduction of the contract system in all the districts.

B. Establishment.

The expenditure exceeded that of the previous year by Rs. 10,076. The increase was chiefly due to the existence of the Direction office and North Vellore District Forest office during the whole year and to payment of grain compensation allowance throughout the year in all the districts.

CHAPTER IV.—ADMINISTRATION.

38. *Circle Charge.*—Mr. J. S. Battie was in charge of the Circle throughout the year.

New District Forest Charges.—The District of Rāmnād was abolished as a separate forest division, Tinnevelly and Rāmnād forming one charge from 1st July 1912.

New ranges.—The formation of the new Cauvery range was approved in G.O. No. 1046, Revenue, dated 8th April 1913.

Establishment.—During the year a further reduction was made in the scale of temporary establishment owing to the transfer of working of coupes to contractors. In South Arcot, guards' beats were re-arranged and the number of watchers was reduced from 164 to 100, it being considered inadvisable to retain so many irresponsible and low-paid men. Further reduction in the temporary establishment is now being considered in other districts.

39. *Work of Superior Officers.*—The following remarks have been made by Collectors:—

By *Mr. N. E. Marjoribanks, North Vellore.*—" Mr. Hearsey discharged his duties with his usual keenness." *South Vellore.*—" None of the officers was in charge long enough for anything definite to be reported about his work." *South Arcot.*—By *Mr. Aziz-ud-din Sahib.*—" Mr. A. B. Myers worked satisfactorily throughout the year." *Salem.*—By *Mr. J. P. Bedford—North.*—" Mr. Clear was in bad health while in charge of the district. Mr. McCarthy had to deal with the exceptional difficulties and new proposals caused by the change in procedure (Departmental felling to contract system) and has shown great zeal and ability in doing so. The financial results by no means do him justice." *South.*—" Mr. E. C. M. Mascarenhas has been District Forest Officer from 1st July 1912 to 30th June 1913. He has had to introduce the new contract system for disposing of fuel and has managed to do it without friction and with fair financial success, and for this I think that he deserves credit." *Trichinopoly.*—By *Mr. L. E. Buckley.*—" Mr. Thornton worked with his usual energy and did good work in opening up the Kollimalais. I have found Mr. Gajaraja Mudaliyar a promising officer." *Tanjore.*—By *Mr. R. B. Wood.*—" Mr. Thornton had little work to do, but what there was he did with his usual energy." *Tinnevelly.*—By *Mr. J. C. Molony.*—" Mr. Peake did not spare himself throughout the year; but he seems to have been singularly unfortunate with his office. I trust that the improvement which he predicts will come to pass." *Rāmnād*—By *Mr. A. R. Loftus-Tottenham.*—" Mr. Peake worked with his usual untiring assiduity and did some very thorough and useful touring in the Srīvilliputtūr Range. I think he is hampered—like others in this part of the world—by an ill-trained office."

I would add that Mr. McCarthy in North Salem and Mr. Scot in Madura have worked hard and done very good work.

40. *Executive establishment.*—Rangers Devadasan and C. A. Ramakrishna Ayyar are especially commended for good work and Mr. Cornwell's field work was conducted with energy and intelligence. The work and conduct of Deputy Rangers with a few exceptions was unsatisfactory. In South Vellore, the services of an acting Deputy Ranger were terminated for incompetency and neglect of duty. In South Arcot, one Ranger was suspended and transferred for gross neglect of duty. In South Salem, the services of a probationary Ranger and a probationary Deputy Ranger were terminated. In Trichinopoly, the work of Ranger C. Rajagopal Nayudu was condemned and a probationary Deputy Ranger was reverted to his permanent appointment of Forester. In Madura, one Ranger was dismissed for falsification of accounts and misappropriation of Government money, and for a similar offence another Ranger was suspended. Final orders have not been passed in his case. In this district, the services of a Deputy Ranger were also dispensed with for neglect of duty. In Tinnevelly, one Deputy Ranger was suspended.

41. *Protective establishment.*—The conduct of the protective staff continues to be unsatisfactory. In North Salem, one Forest Guard is under trial for connivance in a forest offence. In the districts, two Foresters were reduced, three Foresters and 66 Forest Guards and 148 watchers were dismissed or removed from service. Three Foresters, 77 Forest Guards and 63 watchers were suspended. From Tinnevelly, it is reported that some promising Foresters have been recruited.

42. *Ministerial establishment.*—Work was generally satisfactory in all offices except North Vellore and Tinnevelly. In North Vellore, there were constant changes and little control. Work has been very unsatisfactory and arrears have been allowed to accumulate. In Tinnevelly also there have been constant changes resulting in great delay in the disposal of work.

43. *Health of establishment and casualties.*—The health of the establishment was fair in all districts except on the Javadis in South Vellore, on the Pachamalais and Kollimalais in Trichinopoly and on the Ghat forests of Srīvilliputtūr Range in Tinnevelly. Seven Forest Guards, one peon and five watchers died. In Madura, one watcher was murdered while carrying tapals. The Police reported the case as undetected. In Tinnevelly, a Forest Guard was missed and his body was found some days after suspended from a tree in the forest. The Police could make nothing of the case. Eventually a relative of the deceased filed a complaint against a Forester and some others who were tried and discharged by the Magistrate. As the deceased was reported to be of immoral conduct, if he was murdered, it was probably on account of his private conduct.

44. *Relations between Revenue and Forest Officers* continued to be cordial throughout the Circle. The reports of North Salem and Trichinopoly do not furnish information regarding attendance at jamabandy. In Tinnevelly, it is reported that it is not usual for Forest Officers to attend jamabandy. In all other districts, the Range Officers attended and no complaints of any importance were brought to notice.

45. *Service books* are reported to have been maintained and verified in all the districts.

46. *Conservator's inspections.*—One hundred and ninety-six days were spent in camp. All the districts were visited and all the District Forest Offices inspected.

47. *Touring of District Forest Officers.*—All the District Forest Officers except Tinnevelly spent more than six months in camp. The touring of the District Forest Officer, Tinnevelly, fell short of the prescribed minimum by twenty-five days and this is attributed to his long stay at head-quarters to clear off arrears of office work.

48. *Inspection of Range offices.*—All the Range offices were inspected except one in South Vellore and three in Tinnevelly. These three offices in the latter district were, however, inspected after the close of the year.

49. *Audit of accounts of District Forest offices.*—The accounts of all the District Forest offices were audited by the Auditors of the Accountant-General's office and the results were reported to be satisfactory.

50. *Imperial Forest College, Dehra Dun.*—One Deputy Ranger returned with a Ranger's certificate. One probationer for the Provincial service was under preliminary training in North Salem division and has since been deputed to the College.

51. *Madras Forest College, Coimbatore.*—Of the eight candidates deputed in the previous year, one Ranger absented himself without permission on plea of illness and was sent back, one Deputy Ranger died and the remaining six are undergoing training. During the year, two Rangers and two Deputy Rangers were deputed for the course commencing from 1st July 1913.

52. *Vernacular Training school.*—The school was again held in South Salem. Out of 28 students admitted, 26 went through the course successfully, eight in the first class, 16 in the second class and two in the third class. Two were sent back to districts, as they were found unfit for the practical course. The men sent up for training were, with a few exceptions, a poor lot, and the attention of the District Forest Officers has been called to this matter.

CHAPTER V.—GENERAL.

53. *Realization of Revenue from the usufruct of toddy-yielding trees.*—The revenue realized was Rs. 11,513 against Rs. 11,262 in the previous year. The fixed fee system was generally in force. In South Salem, usufruct of trees not taken up under the fixed fee system was leased as usual and the amount realized was Rs. 2,560 against Rs. 3,345 in the previous year.

54. *Measures adopted to encourage the growth of manure-leaf-yielding trees and shrubs.*—The experiments conducted in South Arcot, Trichinopoly and Madura districts for the cultivation of *Sesbania aculeata* for production of seed are referred to in paragraph 20 *supra*. In North Vellore, seed of manure-leaf-yielding species especially *Sesbania aculeata* was sown in ten different localities but without success. It has been found that *Sesbania* did well only on ground that was well ploughed and kept clear of weeds and grass. The experiments conducted in South Vellore were successful. Fifty measures of seed were collected and a portion was distributed to ryots. In North Salem, seed was sown over 9 acres. The experiment proved a failure as the operation was started too late It is reported that there is no demand anywhere in the division for manure leaves, though there seems to be illicit removal of leaves in some reserves. The right to cut leaves in Giddamangalam manure leaf farm was twice put up for sale, but there was no bid. From South Salem it is reported that the ryots did not avail themselves of the concession of taking lands on cowle tenure for cultivation of leaf manure. As the right for the removal of manure leaves was included in the minor produce leases up to the end of the previous year in Tinnevelly, departmental issue of permits commenced only during the year under report, and was limited to specified areas of moderate size instead of the whole forests. Owing to the enhanced rates, the collection of leaves from reserves has been very much reduced in all districts.

55. *Grant of cowles for the formation of Casuarina plantations in sandy areas.*—No applications for such concessions were received In South Arcot, large areas of private lands have been planted up by the ryots, and the industry is well established.

56. *Cultivation in reserved forests.*—In South Vellore, North and South Salem, leases of previous years were renewed. In South Arcot, the Salvation Army was granted a lease of about 852 acres in Kammapuram reserved forest on a nominal annual rent of Rs. 5. With a view to the permanent assignment of the land, a notification for disafforestation has been submitted to Government. In Trichinopoly, excess areas found on survey of certain admitted enclosures were granted as leases. In the Lower Palnis of Madura, areas under cardamom and coffee cultivation under muchalikkas were surveyed in connection with the investigation of the reserves by the Special Deputy Collector. Eviction was ordered in cases of cultivation beyond the limits of areas leased and the crop was sold.

57. *Improvement of water-supply in State forests.*—In South Arcot, three tanks in reserves were repaired at a cost of Rs. 516. In North Salem, bunding streams on the plateau of the Nagaramalai reserve was carried out at a cost of Rs. 300.

58. *Supply of forest produce to meet the wants of the people.*—In North Vellore, permits were, as usual, issued for manure leaves in all Ranges and free removal of grass was allowed for *bonâ fide* domestic purposes. *South Vellore.*—Forty-two fuel and 27 bamboo coupes were sold to contractors and there was no difficulty in meeting the demand. In South Arcot, the wants of the people were met from the coupes worked by contractors who were bound to sell fuel, etc., at certain fixed rates. In North Salem, 16 fuel coupes and 17 bamboo blocks were leased to contractors. There is still

difficulty in getting good contractors in Salem and the District Forest Officer states that the only alternative is departmental fellings. I do not agree with this. Contractors in Salem find it difficult to compete against illicit removals from reserves and unreserves and also from Mitta forests. Besides, departmental works by supplying produce in reality below cost price, had ruined the market and as something like the old rates still prevail, contractors find it difficult to make a profit. What Salem wants is better protection. No doubt there are reasons which make efficient protection a difficult matter in this district but these difficulties, I have no doubt, could be overcome. Mitta forests and unreserved lands cannot be a permanent feature of the situation and the existing system will not raise up a formidable and enduring competition. Better protection not only of the unreserves but of the reserved forests is what is wanted, and from what has been done lately in the district I believe matters will gradually improve. In South Salem, seven village depots supply the wants of the agricultural population. It is observed that the demand was not so keen owing to sales by coupe contractors. In Trichinopoly, coupes were leased out to contractors and permits were issued for minor produce. In Madura and in Tinnevelly, coupe contractors supplied the local demand by keeping depots in or near the forests.

59. *Sale of fuel at the edge of the forests.*—In South Vellore, a small quantity of fuel and 22 tons of charcoal were disposed of at the edge of the forests. In South Arcot, 2,943 tons of billet wood, 304 tons of roots and 5,300 head loads of twigs were felled departmentally, stacked and sold by auction in lots in the coupes of the Coast Casuarina plantations. In Trichinopoly, coupe contractors were bound to sell fuel at the edge of the forests at prices fixed.

60. *Arrangements made for the transfer of sale depots to private agency.*—There are no sale depots in the districts, coupes were sold standing. There were no offers for working coupes in Musiri range, Trichinopoly district. One coupe was therefore worked departmentally for the purpose of teaching contractors and coolies the system of working.

61. *Free removal of grass.*—This has already been referred to in paragraph 28 *supra*. From North Vellore it is reported that in many localities grass was entirely removed, stopping all fear of fires In South Vellore division, free removal was permitted from 11 reserves. The results, it is reported, show that there is a great demand for the produce, and that there is no fear of fire occurring as the result of cutting during the fire season.

62. *Hill tribes.*—As usual, the Malayalees living in the Javadi hills in North and South Vellore were allowed grazing at half rates. In return they are expected to prevent forest fires, and generally assist the forest subordinates in the protection of the forests. From North Vellore, it is reported that these obligations were generally carried out. *South Vellore.*—On account of their local knowledge they are found to be useful as watchers, but as forest guards they are not a success, being illiterate and seldom taking kindly to discipline. As regards the obligations imposed in return for grazing at reduced rates, it may be said that they have been generally carried out, but they still hack bamboos. In two nads, the grazing fee was raised to $\frac{3}{4}$ of the full rate for non-observance of the obligations, but in another nad it was reduced to $\frac{1}{4}$ of the full rate for satisfactory observance of the obligations. These Javadis rules have at the request of the local Malayalees been extended to the Yelagiris. *North Salem.*—In order to obtain the co-operation of the Malayalees in the protection of the forests from fire, a scheme for allowing 150 cattle to graze free in the neighbourhood of Sanniyasimalai on condition of closing the reserve if fire occurs is being tried. In Trichinopoly, Malayalees were freely entertained as forest guards and watchers and they assisted in protecting the forests from fire. *Tinnevelly.*—Of the 10 acres of land allotted to the Kanis for planting teak in the previous year, 8 acres were planted. Planting was rather belated, but 1,800 seedlings out of 3,000 planted are alive. The rest of the area was cleared late and dibbled with seed which has germinated In the second compartment allotted for planting during the year under report, only 5 acres have been cleared and, as seedlings were not ready and the rains were poor, a small bit of the cleared area has been planted. It is too soon to forecast the success of these operations. Two men were appointed as watchers but very soon resigned. A scheme for departmental collection of minor produce through the Kanis and supplying them with food-stuffs to the amount of value of produce collected instead of money payments, is to be tried in the current year.

63. *Prospecting licenses.*—No license was granted during the year.

64. *Timber and Sandalwood transit rules.*—The rules worked satisfactorily. Revised rules for transit of timber in South Vellore and the extension of Sandalwood transit rules to the Pachamalai hills in Trichinopoly were sanctioned during the year. The further report from Madura called for by the Board in its Proceedings, Forest No. 537, Mis., dated 29th March 1912, and referred to in the previous report has been submitted. In Tinnevelly, certificates of registration of the property marks of traders in Travancore timber and of owners of enclosures in the Srīvilliputtūr Ghat forests were issued. There was an inordinate number of applications for registration of property marks from owners of patta lands, and certificates of registration were refused in several cases.

65. *Rules under section 26 of the Forest Act.*—The rules generally worked satisfactorily and no complaints were brought to notice. From South Arcot, it is reported that the influential and intelligent class of ryots in one taluk have a tendency to monopolise or take a much larger quantity of produce than is actually necessary and that the matter of fixing the quantity in accordance with the extent of patta holdings is under consideration.

66. *Rules regarding levy of composition fees.*—Attention was paid to the rules in fixing the amount of composition fees.

67. *Arrangements made in holding the villagers adjacent to particular forests responsible for protection of those forests by dividing the village and blocks of forests concerned—North Salem.*—As crime proceeded from bad to worse in spite of warning and notification calling attention of neighbouring villagers to their responsibilities, steps are being taken to close certain reserves to grazing. *Trichinopoly.*—The system was tried in one reserve of Musiri range and was very successful.

LIVE AND DEAD STOCK.

68. *Live-stock.*—The two bullocks employed for baling water in Chenur plantation of North Vellore division are reported to be in good health. It is proposed to dispose of the animals

69. *Inventory of valuable stock.*—Stock registers are reported to have been maintained in all districts and verified at inspections.

70. *Rain-guages.*—In all the districts readings are reported to have been properly recorded. In North Salem, one guage was stolen and replaced, but one of the bottles of the new guage was then broken soon after by somebody in order to get the local subordinates into trouble. In South Salem, it is proposed to open two new stations. In Tinnevelly, a guage badly placed in the plains two miles from the hills was removed and set up on the hills at 3,000 feet elevation.

71. *Specimens—South Vellore.*—Teak specimen was sent to the Forest Economist and seeds of *Santalum album* and its associates were sent to the Forest Botanist. Bamboo seeds and leaves, flowers and fruit of trychnos Nux-Vomica were sent to the Botanical Survey of India Office. *Trichinopoly.*—Mucuna plant was sent to Sibpur Gardens. *Tinnevelly.*—Some Termites were sent to the Forest Zoologist. Wood and botanical specimens of *Dalbergia spinosa* were sent to the Economic Botanist, Calcutta; specimens of the above as well as of *Mimusops hexandra* and wood specimen of *Filicium decipiens* were sent to the Gass Forest Museum. Some earth-snakes were sent to Mr. George E. Mason of London.

SUITS.

72. *South Vellore.*—One P. Lanakōti Pillai has instituted a civil suit for recovery of Rs. 998–9–6 alleged to be due to him for the construction of subordinates' quarters, etc., at Kottur on the Yelagiris. *South Arcot.*—A civil suit has been filed for damages against Ranger B. T. Sītārāma Ayyar and two subordinates by an accused person in a forest offence who was convicted and whose conviction was reversed on appeal. The suit is being defended by Government. *North Salem.*—A road contractor has given notice of suits in respect of some works done in 1908. The Government Pleader is of opinion that the suits can be defended. *Trichinopoly.*—The hearing of the suit instituted by N. Subbarāma Ayyar, late depot-keeper, and referred to in the previous year's report was closed, but judgment was not pronounced. *Tinnevelly.*—The Chinnakadu hill suit was decided in favour of Government. It is understood that an appeal is being made. The party in the Kuttalam Waterfall suit has moved for an appeal to the Privy Council.

OFFICE OF THE CONSERVATOR OF FORESTS,
SOUTHERN CIRCLE,
Trichinopoly, dated 12th September 1913.

J. S. BATTIE,
Conservator of Forests,
Southern Circle.

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FOREST ADMINISTRATION REPORT,

MADRAS PRESIDENCY,

WESTERN CIRCLE, 1912–1913.

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W.C.–17

FOREST ADMINISTRATION REPORT OF THE WESTERN CIRCLE

FOR THE

FOREST YEAR ENDING 30TH JUNE 1913.

CHAPTER I.—CONSTITUTION OF STATE FORESTS.

1. Alteration in Area.

Reserved forests.—The principal variations were—

(*a*) An addition of 45 square miles by transfer from reserved lands and of two square miles by the adoption of Survey of India figures.

(*b*) One square mile was reduced by rounding off fractions and three small areas aggregating 226 acres were disafforested.

The total area increased from 3,774 to 3,820 square miles.

Reserved lands.—Eleven square miles were newly constituted and 25 square miles were added by the adoption of Survey of India figures; 45 square miles were transferred to reserved forests, two square miles were excluded at settlement and 98 square miles in *South Canara* were transferred to unreserved land. The area at the close of the year was 432 square miles of which five square miles are toda patta lands in the *Nilgiris.*

2. Forest Settlement.

2. One block in each of *Kollegal* and *North Coimbatore*, two blocks in *South Canara* and four in *Central Coimbatore* were finally settled during the year. Fifteen blocks of which ten are small enclosures, aggregating 11 square miles were brought under settlement. The actual settlement of six out of the twenty-four blocks, shown as balance under settlement at the close of the year was completed. The draft notification for Madeswaranmalai in *Kollegal*, the oldest of the pending blocks, was pending revision and has been sent up for publication since the close of the year.

3. Demarcation.

3. Eighty-nine miles of boundaries were permanently demarcated and 94 miles of the existing boundaries repaired at a cost of Rs. 2,726 and Rs. 1,376 respectively. The length of boundaries cleared, repaired or stone-lined, free of cost by subordinates is reported to be 1,202 miles in all districts except *Malabar.* In *South Canara* and the *Nilgiris* the subordinates continued to clear the boundaries as part of their normal work but no accurate record of the results was maintained. The boundaries of the forests in *Kollegal* are being substantially demarcated in accordance with the verification by the Special Deputy Collector; the lengths of boundaries have therefore been reclassified and revised figures are furnished in the return. Fifty-seven miles in *North Coimbatore* were demarcated at a cost of Rs. 2,168 with reference to the verification above referred to. In *North* and *South Malabar*, 169 and 62 miles respectively were as usual cleared for the purpose of fire protection, the cost being debited to that head.

4. Forest Surveys.

(a) *By the Survey of India Party.*

4. The Survey of India Party No. 7 surveyed on the two-inch = one mile scale two reserved forests in *Kollegal* aggregating 11·61 square miles.

(b) *By Departmental Survey.*

5. The survey of timber, fuel and bamboo coupes of the year was carried out departmentally. Sixty-five miles of boundaries of reserved forests in *Kollegal* and the traces of one road in *Kollegal* and two bridle-paths in *Central Coimbatore* and the alignment of nine miles of cart roads in *South Coimbatore* were also surveyed. A special officer of the Madras Survey Department was deputed to survey the boundaries of estates newly leased out on the Anamalais. He worked in the field for about two months and had to stop further work on account of the unfavourable climatic condition; he will resume field work about November 1913.

The maps referred to in section 80 of the Forest Code are reported to have been maintained in all districts.

Special District Reference Maps—Preparation.—The Forest Map Officer prepared the special reference maps of the forest divisions of *Kurnool*, *Bellary*, *Anantapur*, *North Malabar*, *South Arcot*, *South Vellore* and part of the map of *Trichinopoly cum Tanjore.*

Progress in publication.—The maps of *South Canara* and the four divisions of *Coimbatore* were in the press and the map of *the Nilgiris* was being fair-drawn in the Forest Map office at Dehra Dun at the close of the year.

CHAPTER II.—MANAGEMENT OF STATE FORESTS.

1. Regulation of Management.

(a) *Preparation and Control of Regular Working Plans.*

6. *Preparation.*—No new plans were sanctioned. The revised working plan for Beypore tope in *South Malabar* was sanctioned. The District Forest Officer, *Central Coimbatore*, prepared revised working plans for the forests of Mēttupālaiyam range (97 square miles) and for Tadagam reserved forest (47 square miles) and the District Forest Officer, *the Nilgiris*, completed the plan for the Eucalyptus plantations. The collection of statistics for working plans for the Gundal and Doddahalla valleys in *Kollegal* was continued.

Control—South Canara.—Schemes for creeper-cutting and girdling inferior species of woods were prescribed for Doddinamane, Nidle, Nerankimale and Herur reserved forests. Nujinane fuel coupe XVII was not worked as the transport road was not completed. *North Malabar.*—A revised scheme for felling Chedleth timber coupes spreading over eight years against three originally prescribed was sanctioned. Coupe XVII of Begur was worked instead of XX as the felling was in arrears. *South Malabar.*—The planting in Karimpoya and Nilambur plantations was stopped owing to the inadvisability of clear felling the areas stocked with valuable trees, to the scarcity and increase in cost of labour and to the formation of swamps in the valuable natural forests. Old sample plots were abandoned as they serve no useful purpose. Two weedings were made against three prescribed in Beypore tope as the work was commenced late. *Kollegal.*—Coupe V of Araipalaiyam was not completed owing to a large stock of fuel remaining undisposed of. The felling of sandalwood in Bailur coupe was behindhand owing to removal of spiked trees in coupes II and IX. Coupe I of Madeswaranmalai was again worked this year for removal of spiked trees and also coupe II and a portion of coupe III. *North Coimbatore.*—The Talamalai working plan remained as usual unworkable. *Central Coimbatore.*—The timber coupes in tank beds as per Erode range working plan were not worked as the Public Works Department claimed ownership of the areas; the dispute was decided in favour

of the Forest Department. Hay-making was not carried out owing to the unfavourable season. The Sholakarai and Walayar working plan was adhered to except as regards working bamboo areas which were leased out during 1910-11 when all bamboos flowered and seeded. Chinnar working circle was worked according to the provisions of the Bolampatti working plan; the rest of this plan and that for Mēttupālaiyam range are unsuitable and unworkable. *South Coimbatore.*—Talinji working plan was set aside as unworkable. The prescriptions of the Mount Stuart working plan were not carried out and the felling in Tekadi coupe was not completed for want of establishment and labour.

(b) *Preliminary Working Plans Reports.*

7. *The Nilgiris.*—The clearing of inspection paths at Benne and the construction of a camp at Doddahatti were not begun for want of labour. Nine fuel, eight bamboo and three sandalwood coupes in *North Coimbatore* and three fuel coupes in *Kollegal* were worked under systematised working; valuable data are thereby being collected for the preparation of working plans.

(c) *Annual Plan of Operations.*

8. Besides the deviations mentioned under (*a*) and (*b*) the only important deviations were—*South Canara.*—Charcoal was not manufactured in Puttur and Uppinangadi ranges owing to want of demand. The Shiroor-Kadike and Hulimishepere-Heroor roads and the guards' huts at Kombar and Adoor were not constructed for want of funds. *North Malabar.*—Begur coupe XVII was felled departmentally as no purchaser for the standing coupe could be found. *South Malabar*—Pulimunda bridle-path was not constructed as the serambi at Pulimunda has not yet been commenced. The serambi at Nedungayam was not constructed as it was not required. Nelikal bridle-path, compartment roads, serambi at Padukai, kitchen at Walghat and reconstruction of Tiruvizhamkunnu serambi were postponed for want of funds. The preparation of working plans for the natural forests was postponed as the District Forest Officer could not find time to do it unaided. The following works though not provided for were found necessary and carried out: tracing ten miles of bridle-path in the Silent valley, metalling Nedungayam-Chanakundumukku and Nedungayam-Mundakadava roads, construction of a bungalow at Poochipara in the Silent valley and serambi at Karimpoya, sinking a well at Kariem and permanent demarcation of Panakadan reserved forest. *The Nilgiris*—Thorapalli-Mudumalai road was only partly constructed for want of labour. The construction of a range camp at Kargudi and subordinates' lines at Bandishola and the fixing of a hydraulic ram for supply of water to the Kargudi camp were not completed as they were commenced late. *Kollegal*—coupe VI of Gundal and Chickailur were not felled, coupe V not being completed. Chickailur-Singanallur road, the upper portion of the Gundal valley road, depot at Kollegal, subordinates' lines at Mathipuram, rest-house at Ponnachi were not taken up for want of establishment and funds. The sinking of a well at Lokanhalli was deferred in favour of the incomplete wells of last year. *North Coimbatore*—Palamalai sandalwood coupe II was not felled as coupe I was commenced only during the year under report. Uginium-Oshatti road, rest and out-houses at Oshatti, sinking a well at Sengolam and permanent demarcation of Hasanur enclosures and Pachapalimalai and North Bargur reserved forests were put off for want of funds and establishment. Felling fuel in Pachapalimalai coupe I, construction of Attani-Varacombai cart-track and sinking wells at Tattakarai, Attani and Chikhalli were carried out although these were not provided for. *Central Coimbatore*—Kandiyur fuel coupe VI was not felled owing to non-disposal of fuel felled in the previous coupe; Narasapuram coupe I was not sold as it would interfere with the future working as per proposed working plan. Anaiarkandi-Muthikolam road was not constructed owing to delay in the preparation of estimates and plans. Elival, Doni and Anaimulli-Chindakki bridle-paths were deferred, the former in favour of urgent works and the latter owing to non-completion of the trace and to the site not being acquired. Subordinates' lines at Tholampalayam were postponed for want of funds. The enclosures in some reserved forests were not acquired owing to dolay in valuing them by the Revenue Department. Removal of prickly-pear

from coupe VII Chennimalai was put off pending results of previous years' operations. *South Coimbatore*—felling Tekadi coupe XXXVI and creeper-cutting and improvement fellings in Ulandi coupe I were not carried out for want of establishment. Kottur fuel coupe XV was not worked, the previous coupe not being completed. Repairs to Tekadi cart-track, extension of tramline to Peruvari and construction of Deputy Ranger's quarters at Anaipadi were deferred pending orders on the proposed Tekadi tramway. Aliar road and serambi and subordinates' lines at Ulandi were pending selection of sites and further scrutiny. Platform for a crane at Anaipadi and bullmen's quarters at Sethumadai were not constructed as they are not required. Lower Punachi cart-track and branch road to Manthorai were not taken up owing to delay in preparation of estimates. Subordinates' lines at Sethumadai, Attaikatti and Kurumalai were given up in favour of urgent works. The Varigalli valley road was not extended to topslip as the work on the original road is very much behind hand. Dam at Talinji was pending further investigation. Construction of a cart-track to the bungalow at Kombu and subordinates' lines at the same place and some minor works not provided for were carried out.

2. Communications and Buildings.

(*a*) *Roads and Bridges.*

9. The amount expended on new works was Rs. 15,626 against Rs. 18,855 in the previous year, while Rs. 30,975 were expended on repairs against Rs. 43,556. The important new works of the year were :—*South Canara*—Construction of four and a quarter miles of road for transport of fuel. *North Malabar*—making a trace of Kottiyur-Dindimal road 7¼ miles in length and construction of eight bridges on the Kottiyur road. *South Malabar*—Metalling parts of two roads at a cost of Rs. 2,668. *The Nilgiris*—Completion of the bridle-paths in North and West Moyar reserved forests. *Kollegal*—Completion of Chengudi-Hosur road and tracing five miles of Singanallur-Lingamankarai road. *North Coimbatore*—Construction of six miles of cart and five miles of ghât roads. *South Coimbatore*—Rs. 1,048 was spent on the Varigalli valley road; progress was poor owing to failure of the contractor.

Tramways.—The proposed Wynaad tramway was abandoned. The working of the tramway in *South Coimbatore* showed a net profit of Rs. 2,712 against Rs. 1,789 in the previous year and the working charges fell from Rs. 1-11-7 to Rs. 1-7-1.

Telephone.—Telephone lines were erected in *South Coimbatore* between Anaipadi and Anamalai *viâ* Mount Stuart and Sethumadai and from Sethumadai to Tekadi. The telephone connections were most useful and about 400 messages were recorded as sent during the year; almost the first message sent saved 24 hours delay in taking an elephant out of a pit. The annual rent for the installation is Rs. 699.

(*b*) *Buildings.*

10. The principal new works of the year were.—*Range offices*—Two in *North Coimbatore* and one in *Central Coimbatore*; one in *Kollegal* was commenced; *Rangers' quarters*—One in *North Coimbatore. Deputy Rangers' quarters—North Malabar.* The quarters at Tirunelli and Pavagaddai were completed and those at Kaimaram and Rampur Ford were commenced. *Subordinates' lines.*—Five sets in *North Coimbatore*, two in *South Coimbatore* and one in *South Malabar. Rest-houses*—One in *South Malabar* and one in *Kollegal* were commenced; one at Kargudi in *the Nilgiris* and two in *Kollegal* were finished. Chindakki and Agali bungalows in the Attapadi valley were commenced. The total expenditure on new works and repairs amounted to Rs. 35,938 and 12,610 respectively.

(*c*) *Miscellaneous works.*

11. The total expenditure incurred was Rs. 8,495. The chief works were sinking and deepening wells and fencing compounds of forest stations and rest-houses. A pipe line for supply of water to Kargudi camp in *the Nilgiris* was aligned and pipes and fittings were purchased. Temporary and permanent dams were constructed to train two streams in *North Malabar* for floating timber, fuel and bamboos.

3. Protection of Forests.

(a) *General Protection.*

12. The forest offences of the year compare with those of the previous year as shown below :—

Class.	Injury to forest by fire.		Unauthorised felling or appropriation of wood and minor forest produce.		Grazing without permission or in tract in which grazing is prohibited.		Other offences.		Total cases.	
	1911-12.	1912-13.	1911-12.	1912-13.	1911-12.	1912-13.	1911-12.	1912-13.	1911-12.	1912-13.
Reserved forests.										
Cases taken into Court ..	39	29	307	349	155	159	101	73	602	610
Cases compounded ..	37	49	1,273	1,428	595	622	174	161	2,079	2,260
Cases undetected ..	350	300	2	13	6	1	..	2	358	316
Total ..	426	378	1,582	1,790	756	782	275	236	3,039	3,186
Unreserved lands.										
Cases taken into Court ..	..	2	36	76	..	..	2	4	38	82
Cases compounded ..	2	2	316	514	..	..	15	12	333	528
Cases undetected ..	..	1	1	7	..	..	..	1	1	9
Total ..	2	5	353	597	..	..	17	17	372	619
Grand total ..	428	383	1,935	2,387	756	782	292	253	3,411	3,805

Offences in reserved forests.—There was an increase of 147 offences over the figures of the previous year ; the offences under "illicit felling" and "illicit grazing" increased while those under the two classes decreased. The increase under "illicit felling" was chiefly in *South Canara* due to smuggling of sandalwood from kumaki lands under cover of warg permits, in *North Coimbatore* to better protection and in *Central Coimbatore* to greater vigilence, while that under "illicit grazing" was mainly in *North Coimbatore* attributed to better protection. The decrease under "injury by fire" was general and under "other offences" was marked in *Kollegal* due to better understanding of the timber transit rules by the people.

Of the cases taken into court 93 per cent. ended in conviction against 91 in the previous year and the number of withdrawn cases was exceptionally low, *i.e.*, ·5 per cent. The punishments inflicted by Magistrates are reported to be satisfactory in *South Canara*, adequate in *Kollegal* and *Central Coimbatore* though perhaps not sufficiently deterrent in the former district, not deterrent in *North Coimbatore* and lenient in *North Malabar* ; no comment is made in the other districts.

The number of cases compounded and the fees realized were 1,932 and Rs. 18,964, respectively, against 1,731 and Rs. 15,131 in the previous year. The increase in the amount of fees realized was chiefly in *Kollegal* due to a large number of cattle involved in grazing cases and to imposition of heavy fees in a few cases of illicit fellings and of hunting and shooting and in *North* and *Central Coimbatore* to increase in the number of cases detected and also to levy of heavy fees in goat browsing cases in the last-mentioned district.

Working of the rules for compounding grazing offences.—The rules have worked satisfactorily in *Kollegal* and *Central Coimbatore* and are reported to have been observed in *North Coimbatore*. They do not differ from the existing practice in *the Nilgiris* and were not adopted in *South Canara* and *South Malabar* owing to absence of wholesale illicit grazing in the former district and to closure to grazing of all forests in the latter. In *North Malabar* the rules have no importance owing to sparseness of population and to the existence of a vast extent of unreserved and private lands. No reference is made to this subject in *South Coimbatore*.

The percentage of undetected cases to the total number of offences decreased from 11·7 of the previous year to 9·9 per cent. Ninety-five per cent. of the undetected cases are fire occurrences, which are correctly treated as offences inasmuch as the fires undoubtedly endangered reserved forests. Fires known to have been caused by lightning are of course excluded.

Holding adjacent villages responsible for commission of offences in particular forests.—In *North Malabar* and *Kollegal* notifications defining the forests and villages responsible for commission of offences therein were published. The system was not elaborated in *South Canara* for want of establishment and cannot be introduced in *Central Coimbatore* until the forests are sub-divided into small grazing blocks. It is hardly workable in *the Nilgiris* where the forests are scattered and is not required in *South Malabar*. After due warnings to villages responsible, areas in which offences had become common were closed to grazing for part of the year in *North Coimbatore*; in *South Coimbatore* areas in which there were extensive illicit fellings were closed to grazing.

13. *Offences in unreserved lands.*—The offences of the year increased by 66 per cent. but the increase is purely a paper one, being due to submission of returns by the Revenue Divisional Officers who failed to do so last year. Particulars are still incomplete; in *South Malabar* the offences in the lands under the control of the department alone are reported; no offences are reported by *the Nilgiris* and in *South Coimbatore* only those offences actually dealt with during the year and furnished in the Divisional Officers' quarterly returns are reported, pending cases being unaccounted for. Eighty-four per cent. of the cases taken into court ended in conviction. The number of cases compounded was 519 and the amount of compounding fees realized, Rs. 5,113

14. *Rewards.*—A Deputy Ranger in *South Canara* was granted a reward of Rs. 15 for having detected under difficult circumstances a case of illicit felling of timber from kumaki lands. In *North Malabar* a reward of Rs. 17 was granted to a fire patrol and a contractor in a case of fire. In *Kollegal* one Ranger, one Deputy Ranger, five other subordinates, two subordinates of the Police department and a village munsif were granted rewards aggregating Rs. 138. Sixteen persons in *North Coimbatore* and 12 in *South Coimbatore* were granted rewards amounting to Rs. 77 and 79 respectively for good services rendered in detection of offences; rewards of Rs. 10-8-0 were also granted in the latter district to the informers in four cases of illicit tree tapping.

(*b*) *Protection from fire.*

15. *Special protection.*—The system of protection remained unchanged. The area attempted to be protected was 1,122 square miles against 1,022 square miles in the previous year; the percentage of area which escaped fire was 97 against 93 in the last year. The general results for the circle are satisfactory despite the dry and unfavorable season. The cost of protection per square mile of area attempted fell to Rs. 23-7-6 from Rs. 27-6-8 in the previous year.

16. *General protection.*—The area attempted during the year amounted to 2,501 square miles against 2,526 square miles and the percentage of failure was 1·4 against 8 in the previous year. The registration of fires in these areas continued to be unreliable and several of the actual fire occurrences were not reported. No improvement can be expected until the establishment is strengthened.

17. The number of, and the causes to which, the fires were attributed are given in Appendix D. The number of fires decreased from 490 to 418 and the area burnt was 78 per cent. less than that of last year.

(*c*) *Protection against cattle.*

18. 71·7 per cent. of the total forest area was open to grazing of cattle but closed to goats. The area closed to all animals for the whole year was 740 square miles or 17·4 per cent. against 510 square miles in the previous year, while the area closed for part of the year decreased from 172 to 50 square miles or 1·2 per cent.; the increase closed for the whole year was in *Kollegal* due to recomputation of the areas of certain forests, in *North Coimbatore* to closure of 79 square miles on account of extensive fires, in *Central Coimbatore* to extension of areas under reproduction and in *South*

Coimbatore to the omission of 20 square miles from the last year's return; the decrease in the area closed for part of the year was due to re-opening of certain areas in *Kollegal* and *North Coimbatore* closed to grazing last year. One hundred and seventy-nine square miles were closed to goats and sheep in *South Coimbatore* in accordance with the provisions of the grazing scheme for Udumalpet taluk.

The number of cattle impounded during the year is analysed in Appendix E. The impoundings compared with those of last year increased by 2,737. The fluctuations were chiefly in *Kollegal* and *North Coimbatore* and were mainly due to illegal rescue of cattle in the last year in the former district and to closer supervision in the latter.

(d) Protection against injuries from natural causes.

19. *North Malabar.*—There was a slight attack by a defoliator in the Begur and Chedleth teak plantations, but numerous crows help to keep the pest down. Lantana was uprooted in Begur 1892, 1894, 1895 and 1906 teak plantations and in Neduthanna orange tope. The experiment of planting castor on an area cleared of lantana was continued but no definite results are available. *South Malabar*—The young teak plantations were attacked by *Hyblæa* from 13th September to 10th October, and by *Pyrausta* from 17th November to December; as an experiment a light ground fire was burnt through 8 acres of Nellikutha 1871, and thousands of caterpillars were thus destroyed, but the final result is not reported. More energetic measures are required in order to eradicate these pests. Locust attacks occurred in November 1912 and February 1913 in plantations 1870, 1871 Nellikutha and 1902, 1907 Karimpoya; over 1,000 seers of locusts were collected and destroyed at a cost of one anna per seer. The mahogany borer attacked seedlings on Nilambur hill. A heavy storm on the 22nd July did much damage in the plantations; in Panangode 1886, 133 trees had their tops broken off by the wind; this plantation was exceptionally susceptible owing to the heavy thinning recently carried out. The erosion in Chathamborai 1872 extended slightly, and a high flood in June 1913 caused slight erosion in Eddacode 1846. *Kollegal*—Spike continued to spread in sandalwood areas, in spite of the removal of spiked trees as fast as the establishment can manage it. *North Coimbatore*—Spike invaded two new sandalwood areas; nearly 8,000 dead spiked trees were marked in Hassanur coupes II and III. *Central Coimbatore*—*Hyblæa* and *Pyrausta* attacked teak in Walayar at the commencement and end of the monsoon, but damage was small as teak is not growing pure in these forests. *South Coimbatore*—Lantana is a dangerous pest in Tekadi leased forests and there is not enough labour to thoroughly eradicate it; small areas were cleared partly by coolies and partly by elephants. Loranthus was cut off branches of trees in Gudaravalli working circle.

4. SYLVICULTURE.

(a) Natural Reproduction.

20. *South Canara.*—It was again a bad year for *Hopea parviflora* seed; *Xylia dolabriformis* as usual reproduced well by seedlings and coppice shoots. *Catechu* and *Pterocarpus* seeded well but most seedlings were destroyed by cattle. Teak reproduction by coppice was fair in Muliar fuel coupe, but absent everywhere else. *North Malabar*—Reproduction from seed or rootsuckers of *Anogiessus latifolia, Grewia tiliæfolia, Pterocarpus Marsupium, Eugenia Jambolana, Terminalia tomentosa* and *Dalbergia latifolia* was good. Teak reproduction by rootsuckers improved but seedlings were scarce. *Hopea parviflora* seeded well in Kanoth; this is remarkable as it failed in *South Canara*. *Bambusa arundinacea* seeded in Begur and part of Chedleth ranges. *South Malabar*—*Bambusa-arundinacea* seeded in Amarampalam range, and in consequence there will be a scarcity of bamboos for floating for a few years. Reproduction from seed in Nilambur range was good, in Amarampalam range bad. The growth of *Xylia dolabriformis* in third class teak areas in Nilambur is remarkable; *Dalbergia latifolia* seedlings also appeared but were decimated by semi-wild cattle. The thinning of pure mahogany (*Swietenia macrophylla*) patches in Eddacode has had a marked beneficial effect on the growth and healthiness of the trees. *Nilgiris*—Reproduction by seed was poor as usual *Kollegal*—*Hardiwickia binata* seedlings, from last year's seed crop, are plentiful in Arepalaiyam, Chickailur and Madeswaranmalai. *Anogeissus latifolia* reproduced well everywhere. *Dendrocalamus strictus* seeded over most of the western

portion of the district. *North Coimbatore*—Coppice reproduction in young coupes closed to grazing was good. *Central Coimbatore*—Reproduction from seed was poor, except in the coupes recently felled and closed to grazing and the Attapadi valley. *Hardwickia binata* is getting on well in Singara tope, Kotagiri and Sundapatti working circles. It was a good seed year for all the important species. Coppice reproduction was satisfactory, though naturally comparatively poor in the east of the district. *South Coimbatore*—It was a good seed year for all the important species except *Xylia dolabriformis*. Coppice reproduction was satisfactory.

(*b*) *Artificial Reproduction.*

21. *Regular plantations.*—In *South Malabar* 51 acres of 1912 plantation were planted with teak spaced 8′ × 8′, with a few *Terminalia tomentosa*, *Lagerstrœmia flos-Reginæ* and *Dalbergia latifolia* interspersed in swampy ground. This completes the extension of the plantations. In 1912 plantation 6,711 teak and in 1911 plantation 36,826 teak and 750 *Terminalia tomentosa* casualties were replaced. In plantation 1908 the area planted 12′ × 5′ contains 130 healthy plants, and the area in which seed was dibbled contains 90 healthy plants. In the Beypore cocoanut plantation 5·62 acres were planted, and the plants in several plots were manured with a special fertilizer. The results of last year's manuring are not reported. In *the Nilgiris*—the experimental plantations of nine varieties of timber-yielding *Eucalyptus* at three different elevations were maintained, blanks filled and casualties replaced. In Snowdon 1,515 blanks were filled and 4,862 casualties replaced; in Aramby the numbers were 13,097 and 2,261, and in Keti 15,962 and nil; the plantations are now fully stocked. In Snowdon and Aramby *Eucalyptus punctata*, *Eucalyptus propinqua* and *Eucalyptus paniculata* are the most promising, while at Keti the varieties doing best are *Eucalyptus acmenoides*, *Eucalyptus pilularis* and *Eucalyptus propingua.* In Jackal plantation *Cyprus* and *Hakea* transplants were put out in Fife's and Rock coverts; the *Hakea* was badly frostbitten and *Cyprus* suffered from drought. In *Central Coimbatore* 1,500 *Swietenia mahagoni* seedlings were planted out at Dhoni of which only 356 survive; seedlings to replace casualties have been raised. In coupe VI of Virumandampalayam reserve 19,737 palmyra seeds were dibbled; germination was good. In *South Coimbatore* 30 acres were partly cleared for addition to Karianshola plantation, but the area was not planted up.

Taungya plantations.—In *South Canara* the area kumaried in Kasaragod range was reduced to 80 acres from 183 in the previous year; part of this area was sown with teak, *Terminalia tomentosa* and *Pterocarpus marsupium*; Rs. 51–8–9 has been sanctioned as payment to the Marathis for 10,310 seedlings, 3′ high, raised by them in kumaried areas. Efforts are being made to make the Kudubies cultivate the same area for two successive years. In *North Malabar* the ponam cultivators of Kanoth sowed mango, jack and teak seed in the areas cultivated; 25 per cent. of the seedlings were alive at the close of the year.

Cultural operations.—In *South Canara* seeds of the more valuable species were sown or dibbled by subordinates at the commencement of the monsoon with a certain amount of success. In *North Malabar* groups of teak were planted in suitable patches in the reserves of Chedleth range, 10,000 seedlings being put out; results cannot be judged yet; teak seed was also sown among the ashes of burnt loppings in coupes XVI, XVII of Begur, but the results were not very successful. In Kanoth only 1,500 out of 14,000 teak seedlings planted in open spaces in the fuel coupe are alive. In *South Malabar* 35 acres of third-class plantation were weeded and casualties were replaced; over 27,500 plants were put out in some of the plantations, but many of them either died or were destroyed by deer. These efforts at restocking third-class areas have now been put a stop to, as the results do not justify the expense. In *Kollegal* 1,750 sandal seeds were dibbled into pits and along fences round Cowdalli, but no result from the previous year's operation is yet visible; 500 lbs. of *Acacia arabica* seed and 180 lbs. of *Cæsalpinia sepiaria* were sown in Dodda Induvadi blocks. Three hundred trenches were dug along the slopes of Gundal coupes II and III; the result of sowing in these trenches is satisfactory; three sacks of sandalwood seed were dibbled in under bushes over 100 acres in the Guligai reserve; the *Shorea Talura* nurseries at Gundal and Bylore were maintained, and the plants will be put out next year. In *North Coimbatore* 3,000 teak seedlings

were put out in October 1912 in coupe VI Kavalur after clear felling bamboos; on 2nd June 1913 650 were found alive; others may revive later in the year. Seven hundred and twenty-five teak seedlings were put out in coupe V Ennamangalam and died down during the hot weather. At Geddesal 3,837 rosewood, 1,600 *Pterocarpus marsupium* and 563 *terminalia tomentosa* seedlings were planted out in August 1912; at the close of the year 1,720, 465 and 190, respectively, survived; casualties were largely due to spotted deer and hares; preparation for further planting was made; casualties in the previous experimental plantations appear to have ceased and the plants have every chance of establishing themselves. At Onnaitittu 82 planted and 90 dibbled *Pterocarpus marsupium* survive. Six bags of seed were dibbled in coupe IX Senkaradu and coupe VIII Kanakampalayam, but failed as the dibbling was carried out too late. During May 32 bags of seed were dibbled in a burnt area, and in November, 1,942 seedlings were counted; sandalwood seeds were dibbled in pits in Kadhatti coupe, and sandal and other seeds were sown broadcast in ploughed land in the minor enclosures acquired in Palamalai reserve. In *Central Coimbatore*, over 80,000 running feet of trenches were dug in coupe VI Arachalur, coupe VI Villikaradu and coupe VI Chennimalai, and seeds of *Albizzia lebbek*, *Acacia planifrons*, *Tamarindus indica*, *Melia azadirachta* and *Chloroxylon swietenia* were sown in October; in June 1913 about one plant to every six feet of trench survived. Seeds of the above species were sown in block III Kanjikoil in areas cleared of pricklypear; the hot weather killed most of the seedlings. In coupe VI Villikaradu 3,000 seedlings were raised in pot tiles to be planted out in October 1913. Various seeds were dibbled in coupes VII Odanthorai, VIII Modur, III Kotagiri, I Singaratope and from 10 to 20 per cent. of the seedlings survive; the total expenditure on these coupes was only Rs. 10–2–0. In coupe VII Modur 5,000 basketted plants were put out at a cost of Rs. 35–8–0; 50 per cent. survive. The Scot plantations in Odanthorai, Garudachalam plantation and Modur were visited by elephants who ruined most of the plants.

(c) Operations for improvement of the growing stock.

22. In *South Canara*, light improvement fellings were carried out over 3,535 acres at a cost of Rs. 1,076, and creepers were cut over 1,735 acres at a cost of Rupees 172, and over 1,500 acres by the establishment The improvement fellings have promoted the advance growth of *Hopaa parviflora* and wild jack. In *North Malabar* lantana was uprooted in three of the Begur teak plantations, and seedlings of good species were cleared by "grass knifing" in parts of Begur and Chedleth ranges. The 1892 and 1894–95 teak plantations were thinned at a cost of Rs. 172. In *South Malabar*, thinnings were carried out over 1,195 acres of teak plantation at a cost of Rs. 1,415. Mahogany was freed of teak in plantations 1902, 1904, 1905 and patches of pure mahogany were thinned. Wild elephants did much damage in young plantations in February and March with the result that 3,110 saplings had to be cut back in plantations 1898, 1910 and 1911. The bamboo seedling crop was rooted out over 94½ acres in plantations 1872, 1873 at a cost of Rs. 241, with satisfactory results. Parasites were removed from 1,072 acres of plantation (Rs. 570) and creepers were cut over 498 acres of young plantation (Rs. 220). Creepers were also cut by the establishment over 350 acres in Amarampalam natural forests and 31½ acres in Panakadam reserve. Weeding was carried out over 568 acres of young plantation (Rs. 1,772) and pruning over 410 acres (Rs. 222). The cost of maintenance of young plantations was Rs. 1·20, against Rs. 1·21 in the preceding year. In *the Nilgiris* improvement fellings were carried out over 360 acres of Mudumalai forest at a cost of Rs. 2,971, the outturn was about 30,000 cubic feet of small teak, *Pterocarpus marsupium* and rosewood. Five acres of Benne teak plantations were thinned, 1,550 poles being removed. In *Kollegal* sandal seedlings and trees were freed of creepers and shade over 2,800 acres in Madeswaranmalai working circle; the felled coupes in Hanur adjoining the main road were wire fenced, and 56,065 dead and dying bamboos were removed from the Gundal and Arepalaiyam working circles. In *North Coimbatore* creepers suppressing sandal were cut in 4 coupes, and 48 acres in 2 fuel coupes were cleared of prickly-pear; the former operation cost Rs. 55, the latter Rs. 297. Nearly 8,000 spiked sandal trees were marked in Hassanur working circle for uprootal. In *Central Coimbatore* creepers were cut in all fuel coupes prior to felling and in seven young coupes where they were choking the coppice growth and

seedlings. Creepers were also cut over 117 acres in Chenat Nair reserve. The removal of bamboos from Sholakarai reserve was completed, but Walayar has not yet been fully cleared of the old dead bamboos ; the improvement in growth in Sholakarai is very marked. Prickly-pear was removed and burnt over 500 acres in various working circles at a cost of Rs. 2,292, and the previously cleared areas were to a certain extent kept clear by the protective staff. In *South Coimbatore* the canopy was opened in 49 acres of the Tekadi forests to encourage the growth of teak, and in coupe IV Punachi improvement fellings were carried out and the soil round 209 trees was cleared and turned to encourage an advance growth of seedlings. Weeding was also carried out in coupes II and III Punachi.

(*d*) *Experiments.*

(i) *On species.*

23. *Swietenia Mahagoni* plants are doing well in *South Canara*, *North* and *South Malabar* but some have been damaged by deer in the last named district; 30 plants at Mudumalai (*Nilgiris*), 24 trees ranging from 10 inches to 42 inches girth at Vellapathi (*Central Coimbatore*) and 69 trees from 6 inches to 26 inches girth at Sholakarai (*Central Coimbatore*) are doing well.

Swietenia macrophylla.—The Chathamborai tree now forty years old measures 104 inches in girth and 105 feet in height; the species is established and natural reproduction is taking place; three pounds of seed were collected and 1,360 seedlings raised during the year.

Manihot Glaziovii in *South Malabar* was as usual much damaged by pigs.

Hevea braziliensis is doing well in *South Malabar*, 7 trees were tapped and yielded 15 lbs. rubber. There appear to be two varieties of this *Hevea*, one with a smooth grey bark which yield little or no rubber, the other with a rough brown bark which yields plentifully.

Landolphia Florida.—Eighteen creepers survive in *South Malabar.*

Kicksia Africana.—Twelve plants survive in *South Malabar.*

Cedrela odorata (West Indies) is doing well in *South Malabar and Coimbatore* ; the largest tree in the Coimbatore museum garden is now seven years old and 30½ inches in girth.

Pinus insignis—Twenty plants at Cairn Hill (*Nilgiris*) are healthy and up to 13 feet high.

Schizolobium excelsum seeds from the Palnis were sown at Mount Stuart (*South Coimbatore*) and three seedlings out of twelve survive.

Tectona grandis.—In *South Coimbatore*, a light ground fire was run over an acre of coupe III Punachi in order to test the effect on germination of teak seed.

Bamboos.—The various exotic bamboos in *South Malabar* continue to flourish ; in the *Nilgiris* the square Japanese bamboo in Gamble's nursery, Cairn Hill, is rapidly spreading ; the *Thyrsostachys Copelandii* imported last year died. In *North Coimbatore* the results of felling one acre of bamboos every month for a year were negative, growth being almost equally good on all the twelve acres cleared. In *South Coimbatore* an experiment in clearing bamboos in order to favour regeneration of timber trees was commenced ; no definite results can be expected for another year or two.

(ii) *On other points.*

24. In *South Malabar* the experiment to test the upward growth of teak stems and bark was continued ; no tree showed a difference of more than ·66 inch since the original measurements made three years ago. A ground fire was run through eight acres of Nellikutha plantation to test the effect on caterpillar pests and locusts ; several thousand immature locusts were destroyed ; the effect on the caterpillar pests has not been reported. Two acres of swampy land from which young planted teak had died out were clean weeded and replanted, to see if clean weeding will affect the swampiness of the ground ; no results can be expected yet. Teak borer larvœ were

sent for identification to Dehra Dun where they are being bred. In *Central Coimbatore* the experiment to determine the effect of fire on grass growth was resumed; the section allotted for hay making was cut and yielded 1,185 lbs. hay against 698 lbs. in 1909.

5. Exploitation.

(a) System of Management.

25. The various sylvicultural systems in force are classified in the following table:—

Sylvicultural system.	Area in square miles.	Percentage of total area under each sylvicultural system.
Method of clear fellings by compartments	10·32	·73
Uniform method	...	...
Group method	...	...
Selection method	217·48	15·45
Simple coppice	4·80	·34
Coppice with standards	144·62	10·27
Method of improvement fellings	262·60	18·65
Areas not worked or subjected to any definite system of working	768·18	54·56
Total ...	1,408	100

Note.—The areas given in this statement cannot be relied on, as much of the information received from districts was faulty, and received so late that there was not time to obtain revised figures.

(i) *Major Forest Produce.*

(1) *Clear or Regeneration Fellings.*

26. In *South Canara* 10 acres of Tannirbhavi plantation, and Kuthiar reserved forest were clear felled with a view to disafforestation.

(2) *Selection Fellings.*

27. *South Canara.*—Selection fellings were carried out in 17 acres of coupe VIII of Mudibare and mature trees in Someshwar coupe IX were sold standing. *North Malabar.*—Five hundred and ninety acres in coupe XVII of Begur and 500 acres in coupe III of Chedleth were felled. *The Nilgiris.*—Sandalwood trees which yielded 276 maunds were felled in Segur range. *Kollegal.*—Spiked sandal trees were extracted from coupe II and a portion of coupe III of Madeswaranmalai and from coupes II and IX of Bailur; in all 8,719 trees were extracted. A small area in Hanur reserved forest was felled for supply of small timber and agricultural implements. *North Coimbatore.*—Sandalwood trees were felled over an area of 6,495 acres and bamboos extracted from eight coupes of 14,689 acres. *South Coimbatore.* A portion of coupe XIX of Tekadi leased forest, coupe I of Ulandi and coupe IV of Punachi working circles were felled.

(3) *and* (4) *Improvement and Coppice Fellings.*

28. In *South Canara*, twelve coupes covering about 600 acres in Coondapoor and Sankaranarayana ranges and 25 acres of a coupe in Kasaragod range were coppiced. Eighty acres in Udipi range were felled to supply fuel to 203 sandalwood oil stills. In *North Malabar*, a coupe of 25 acres in Kanoth reserved forest was felled for supply of fuel to Tellicherry town. In *South Malabar*, thinnings in teak plantations were carried out and 30,838 trees were removed; 109 dead, windblown and uprooted trees were also removed. In *the Nilgiris*, improvement felling was carried out over 360 acres in Mudumalai working circle; the yield was 31,153 cubic feet of timber, mainly teak. Fifty-seven acres of plantations in Coonoor and Ootacamund ranges were coppiced for supply of firewood and charcoal to the public. In *Kollegal*, improvement fellings were carried out in coupes I to IV of Madeswaranmalai sandal working circle for freeing sandal trees. Four fuel coupes covering 275 acres were coppiced

In *North Coimbatore*, twelve fuel coupes covering 942 acres and 226 acres for supply of drag poles and agricultural implements were coppiced. In *Central Coimbatore*, thirty fuel coupes covering an area of 1,471 acres were coppiced. In *South Coimbatore*, improvement felling was made over 90 acres in Punachi coupe IV and 328 acres were coppiced.

(5) *Unregulated Fellings.*

29. In *South Canara*, cinnamon leaves and firewood required for working 50 stills were removed from unreserved lands. Timber and bamboos were removed from unreserved lands on payment of seigniorage. In *North Malabar*, bamboos, fibre, canes and reeds were removed on permits except from Kottiyur reserved forest. In *South Malabar*, bamboos were extracted on permits for rafting and floating timber. In *the Nilgiris*, the requirements of the resident ryots for small timber, fuel, bamboos, etc., was met by issue of permits. In *Kollegal*, removal of bamboos on permits was allowed in places where there are no depots. In *North Coimbatore*, 10,301 cubic feet of timber and 10,191 cubic feet of fuel were removed on permits from unreserved lands. In *South Coimbatore*, bamboos were removed by permit-holders.

(ii) *Minor Forest Produce.*

(1) *Miscellaneous Produce.*

30. Minor produce was generally leased out with the following exceptions :—*By departmental agency*—Manufacture of catechu in *South Canara*, collection of miscellaneous produce in Mudumalai and Udumalpet ranges in *the Nilgiris* and *South Coimbatore*, respectively. Some items such as gallnuts, shekoy and deer horns in *Kollegal* and all produce except tamarind, avaram bark and date leaves in *North Coimbatore*. *By removal on permits*—Rough and chiselled stones, road metal, etc., in *the Nilgiris*, *Kollegal*, *Central* and *South Coimbatore*.

(2) *Extraction of Fodder.*

31. Fodder grass was removed on permits in *South Malabar* and *Coimbatore*; the right of collecting such grass in parts of *Central Coimbatore* was leased out. The free removal of thatching grass from reserved forests in *South Canara* and by the Todas of the plateau and the Chettis of Mudumalai in *the Nilgiris* was continued. The concession of free removal of grass is not required in *Malabar* and was not allowed in *Coimbatore* where there is no necessity for it.

(3) *Hay-making.*

32. About twenty tons of hay were collected in *South Canara* for feeding Government bullocks and buffaloes. The preparation of hay in *Central Coimbatore* was left to private agency.

(4) *Grazing.*

33. Grazing was, as usual, regulated by issue of permits. The forests of *South Malabar* are closed to grazing, and goat-browsing is entirely prohibited. A conference was held with the local ryots regarding the Udumalpet grazing scheme in *South Coimbatore* and the result of it was that they had no real grievance and that the restrictions imposed by the scheme are beneficial to them.

The number of animals licensed to grazing on payment was 386,885 against 373,913 in the previous year.

(*b*) AGENCY OF EXPLOITATION.

(i) *Departmental Agency.*

34. *Major produce—South Canara.*—Felling and transport of timber from one, and fuel from seven coupes, extraction of dead trees from a portion of Parappa reserved forest and of bamboos from the forests of Uppinangadi range, also creeper-cutting and light improvement fellings were carried out. *North Malabar*—39,631 cubic feet of timber were felled in Begur coupe XVII; 20,000 bamboos extracted and 9,600 cubic feet of fuel felled from Kanoth reserved forest for supply to Tellicherry town. *South Malabar*—Thinning of teak plantations, dragging, storing and

classifying saplings and floating some of them to Beypore and felling and transport of bamboos were carried out as usual. *The Nilgiris*—Timber and sandalwood were collected in Mudumalai and Segur ranges, respectively. *Kollegal* and *North Coimbatore*—Small timber and fuel were felled and bamboos and sandalwood extracted. *Central Coimbatore*—Fuel was felled over an area of 204 acres and charcoal manufactured. *South Coimbatore*—Felling and transport of timber from the Anamalais and the leased forests was carried out.

Minor produce.—The details are given in paragraph 30.

35. *Disposal of produce at the edge of the forests.*—In *South Canara*, fuel was sold on a small scale at the edge of Muliar reserved forest and in some of the coupes; also the fuel and timber poles obtained from improvement felling in Pilarkan and the dead trees extracted from Parappa reserved forest. In *North Malabar*, there is no demand for Government produce owing to the existence of extensive private forests. In *South Malabar*, teak logs and saplings in Nellikutha and old Amarampalam plantations were sold on the river bank. The attempts made in Kollegal to sell fuel at one forest edge depot and in small coupes opened at the edge of forests proved unsuccessful as the requirements of the thinly populated villages which are scattered is met from large areas of unreserved lands. Fuel felled departmentally in this division and in *North* and *Central Coimbatore* was sold in the forests. The contractors in the lastnamed district sold timber, fuel and bamboos in the forests to purchasers.

(ii) *By Purchasers.*

36. Seven fuel and one timber coupes in *South Canara*, one timber coupe in *North Malabar*, one timber, three fuel and six bamboo coupes in *North Coimbatore*, all except a few fuel coupes in *Central Coimbatore* and all except one fuel coupe and three bamboo coupes in *South Coimbatore* were sold standing. The public were permitted to remove bamboos on payment of Rs. 2 per hundred from coupes in one of the ranges in *South Canara.* The felling of 297 windblown and uprooted trees in Karimpoya plantation in *South Malabar* was given on contract.

(iii) *and* (iv) *By right-holders and under privileges and free-grants.*

37. The following abstract shows the quantity and estimated value of produce removed by right-holders and free-grantees :—

—	Timber.		Fuel.		Bamboos.		Grass and grazing.	Other minor produce.	Total.
	Cubic feet.	Value.	Cubic feet.	Value.	Number.	Value.	Value.	Value.	Value.
		RS.		RS.		RS.	RS.	RS.	RS.
Right-holders	33,386	13,206	28	2	1,392	4	702	19	13,933
Free-grantees	6,062	920	975	73	9,045	91	..	417	1,501
Total .	39,448	14,126	1,003	75	10,437	95	702	436	15,434

The estimated value of produce and grazing enjoyed by right-holders and removed by free-grantees was Rs. 13,933 and Rs. 1,501 respectively, against Rs. 21,251 and Rs. 2,396 in the previous year. The large quantity of fuel removed by Badagas in *the Nilgiris* on payment of a nominal annual fee of one rupee per house cannot be estimated and is therefore not included in the above abstract. The free grants were made chiefly for rebuilding houses destroyed by fire and grants amounting to Rs. 753 were made in *South Canara* for construction of, and repairs to, churches and temples.

(c) Outturn and sources of forest produce.

38. The following abstract compares the total outturn of major and other produce collected by different agencies from all classes of forests during 1911–12 and 1912–13 :—

Agency of exploitation.	Timber including sandalwood in cubic feet.		Fuel in cubic feet.		Bamboos in number.		Minor produce including grass and grazing in rupees.	
	1911-12.	1912-13.	1911-12.	1912-13.	1911-12.	1912-13.	1911-12.	1912-13.
1	2	3	4	5	6	7	8	9
By Government Agency..	281,316	286,927	2,175,521	2,071,673	122,914	2,06,909	24,496	25,647
By purchasers	259,715	300,788	1,284,676	2,068,520	4,317,539	4,818,838	1,29,111	86,225
By right-holders	51,747	33,386	33	28	1,371	1,292	739	721
By free-grantees	11,053	6,062	636	975	13,056	9,045	98	417
Total ..	6,03,831	6,27,163	3,460,866	4,141,196	4,454,880	5,036,184	1,54,444	1,13,010

Departmental Agency—Major produce.—The increase under "timber" was chiefly in *North Malabar* due to the felling of Begur coupe and in *the Nilgiris* to the large quantity of timber felled in Mudumalai working circle. The decrease under "fuel" was chiefly due to a small quantity of fuel being felled in *the Nilgiris* and *Kollegal* owing to the previous year's stock remaining undisposed of and to the extension of the contract system in *Central* and *South Coimbatore.* The increase under "bamboos" was mainly in *South Malabar* due to a large number of bamboos being felled for floating teak logs and saplings and in *Kollegal* to heavy extraction from flowered clumps. *Minor produce.*—The total outturn of "minor produce" was 146 tons against 207 tons in the previons year, the decrease being chiefly in *Central Coimbatore* due to hay-making operation being left to private agency and partly in *North Coimbatore* owing to poor collection of gallnuts and other miscellaneous produce. *By purchasers.*—No useful comparison of the outturn by this agency can be made owing partly to the unsatisfactory method of converting the sale amounts into yield in proportion to seigniorage rates and partly to the unreliable accounts rendered by contractors. There was a general increase under "major produce"; the increase under "timber" was due to an increase in the value of trees removed from darkhast lands mainly in *Central Coimbatore* and to the outturn from unreserved lands being brought to account in *Kollegal* while it was omitted last year, under "fuel" partly to the reason given for the increase in *Central* and *South Coimbatore* under "departmental agency" and partly to increased areas sold standing in the former district and in *South Canara* and under "bamboos" to a general increased demand and to the coupes sold in *North Coimbatore* being richer than those of the preceding year.

CHAPTER III.—FINANCIAL RESULTS.

39. The following abstract compares the financial position of the year under report with that of the previous year and the average of the preceding quinquennium :—

——	1912-1913.	1911-1912.	Average of the preceding quinquennium.
	RS.	RS.	RS
Revenue	9,07,220	* 7,89,763	6,99,814
Expenditure—			
Refunds	2,925	2,405	2,741
A. Conservancy and works	4,39,315	4,71,572	4,38,980
B. Establishment	3,60,646	3,57,718	2,87,457
Total expenditure ..	8,02,886	8,31,695	7,29,178
Net ..	+ 1,04,334	− 41,932	− 29,364

* Excludes Rs. 3,588 and Rs. 240 relating to the Bombay Presidency and Madura, respectively.

The gross receipts are a record for the Circle. The chief reasons for the increase are :—Higher rates obtained for timber and sandalwood, sale of elephants and fresh leases of lands on the Anamalais for cultivation. Compared with last year, the revenue increased by Rs. 1,17,457 and the expenditure decreased by Rs. 28,809 ;

the proportion of net to gross revenue rose from —5·3 to + 11·5 per cent. Sixty-three per cent. of the receipts was from major produce, 9 per cent. from grass and grazing, 8 per cent. from minor produce and 20 per cent. from miscellaneous sources. Of the expenditure 33 per cent. was spent on the up-keep and improvement of the forests, 38 per cent. on exploitation and 29 per cent. on miscellaneous items. The estimated value of the produce at sale depots at the close of the year was Rs. 2,12,882, against Rs. 1,58,685 at its commencement. The revenue outstanding was Rs. 49,548, of which Rs. 21,001 fell due within the year, chiefly in *North Malabar* and the *Nilgiris*.

The chief variations between the actuals of this year and those of the previous year are explained below :—

RECEIPTS.

(i) *By Departmental Agency.*

Timber + 37,639. Derived mainly by sale of a larger number of plantation teak logs and poles in *South Malabar* and by better prices obtained for and more extensive sales of timber in *South Coimbatore*.

Fuel — 14,681. Due mainly to the introduction of the contract system in *Central* and *South Coimbatore*. The deficit was partly counterbalanced by an increase in *South Canara* owing to the expansion of demand for fuel for the Bombay market and in *North Coimbatore* to increased area worked and to better prices realized.

Bamboos + 2,152. Due to sale at better prices of a larger number of bamboos used for rafting and floating in *South Malabar* and the extraction of bamboos from dying clumps and sale of bamboo thorns in *Kollegal*.

Sandalwood + 49,483. Due partly to sale of previous year's stock in the *Nilgiris* and *North Coimbatore* and partly to better prices realized.

Minor produce + 1,855. Due chiefly to better prices obtained for catechu in *South Canara* and some of the miscellaneous produce in *Kollegal* and *South Coimbatore*.

(ii) *By Purchasers.*

Timber — 7,618. Due mainly to non-sale of Begur timber coupe in *North Malabar* for want of bidders.

Bamboos — 2,614. Due chiefly to non-sale of two coupes in *North Coimbatore*.

Grazing + 5,066. Due to a large number of cattle being licensed for a cattle fair in *South Canara*, closer supervision in the *Nilgiris*, improved protection in *Kollegal* and sale of fodder grass in *North* and *South Coimbatore*.

Minor produce — 6,545. Due principally to exemption of seigniorage on road metal collected by the contractors of the Local Fund Department, to short removal of manure leaves owing to enhancement of seigniorage in *South Canara* and to lower prices realised in *North Coimbatore* for avaram bark and tamarind.

(iii) *Miscellaneous (including confiscated drift and waifwood.)*

Revenue + 53,386. Realized chiefly by sale of nineteen elephants and by collection of arrear rents and value of additional lands leased out on the Anamalais.

EXPENDITURE.

A.—Conservancy and works.

The expenditure was less than that of the previous year by Rs. 32,257. The decrease was mainly under I (*b*) due to extension of contract working in *Central* and *South Coimbatore*, VI (*b*) to sale of elephants and casualties among bullocks which reduced the cost of maintenance and establishment and VII (*a*) to the heavy expenditure incurred in the previous year on improvement to plantation roads in the *Nilgiris*.

B.—Establishments.

The promotion of rangers, increased rate of grain compensation allowance sanctioned for certain districts, advertisement charges for sales of timber and elephants and debit of the cost of uniform and warm clothing chiefly contributed to the increase of Rs. 4,568.

CHAPTER IV.—ADMINISTRATION.

40. Mr. F. A. Lodge held charge of the Circle throughout the year.

District and range charges.—There were no changes. The proposal to divide the *Kollegal* forest division into four range charges was approved but not brought into force pending receipt of the sanction of Government to the creation of the two new ranges.

Establishment.—The paucity of establishment is keenly felt. It has not been possible to keep the ranges fully manned and progress on sanctioned works has consequently not been satisfactory. Several works had to be abandoned for want of establishment.

41. *Work of superior officers.*—The following are extracts of the remarks made by the Collectors: *South Canara—By Mr. Couchman*—" Mr. Barry takes special interest in the scientific side of forestry. He did good work in improvement fellings . . . M.R.Ry. V. Raman Menon . . . . is a very active officer keenly interested in his work. The Extra Assistant Conservator Mr. K. Syed Edulla Sahib, from what little I saw of his work, seemed hardly up to his position and to be wanting in initiative and resource". *Malabar—By Mr. Innes—North*—" Mr. G. F. F Foulkes . . . . His work was marked by his usual enthusiasm and keenness." *South*— " I have nothing but praise for the work of the Forest Officers who held charge of the district during the year." Messrs. Wimbush, Wilson and Bourne held charge of the district. *The Nilgiris—By Mr. Young*—" Was as usual excellent." This remark relates to Mr. Cox. "Mr. Gaudoin's work was satisfactory as Range Officer. For responsible administrative posts he requires a wider outlook and more initiative and drive. Mr. Habibulla Sahib . . . . is doing good work." *Coimbatore—By Mr. Hemingway—Kollegal.* " Mr. Littlewood has worked actively and most industriously throughout the year. " *North*—" Mr. Richmond . . . His work was as usual characterised by energy, industry and efficiency." *Central*—"M.R.Ry. Panchapakesa Ayyar worked hard during the year under report . . . ." *South* " Mr. Fischer worked hard and efficiently throughout the year ". Possibly the most valuable piece of work done during the year was the preparation of the Nilgiri plantations working plan by Mr. Cox.

42. *Executive Establishment.*—The work of the Rangers is generally well reported on, the following being specially commended for good work :— P. Venkataramanan, Saldanha, Lazrado, E. B. Ramachandra Rao, K. C. Kannan, A. Swamikutti and Antony Culas ; the first mentioned has been promoted to Extra Assistant Conservator. Three Rangers were reduced—one temporarily and the other two permanently ; one acting Ranger was suspended and one Ranger was dismissed. The work of Deputy Rangers was not satisfactory, owing partly to want of training. Two resigned, three were suspended, the probation of one was terminated, two were dismissed, and the deputation of one to the Madras Forest College was cancelled for bad work.

43. *Protective Establishment.*—The Foresters are reported to be working well in *North Malabar*. The conduct of Foresters in the *Nilgiris* was on the whole satisfactory and that of guards fairly satisfactory. In other districts the conduct of the establishment with a few exceptions is still unsatisfactory. The punishments reported are: dismissals 30, removals from service 65, suspensions 61, reductions 15 and prosecutions 7 ; the Forester who misappropriated fuel during the last year in *South Canara* has made good the value of the whole quantity misappropriated.

44. *Ministerial Establishment.*—The clerical staff is reported to have worked satisfactorily in *South Canara*, well in *Malabar* and *the Nilgiris*, and moderately well in *North Coimbatore*. The Head Clerks of the *Kollegal*, *Central* and *South Coimbatore* offices were replaced by better men and the tone of these offices is reported to have improved. The head clerk of the *Kollegal* office was reduced for bad conduct, one clerk in the same office was suspended and one in *South Coimbatore* was temporarily reduced. One range clerk in *Kollegal* and one in *Central Coimbatore* were suspended, the services of one range clerk in *North Malabar* and one in *South Coimbatore* were dispensed with, one range clerk in *Kollegal* was removed for inefficiency and another was dismissed for deserting. The work of the circle office was satisfactory.

45. *Health of the Establishment and Casualties.*—The health of the establishment was fair in *North Coimbatore*, good on the plateau of the *Nilgiris* and bad elsewhere.

Deaths.—One in each of the *Nilgiris*, *Kollegal* and *Central Coimbatore*, two in *South Coimbatore*, three in *South Canara*, four in each division of *Malabar*. It has been an exceptionally unhealthy year, and a large number of subordinates have had to be granted leave on medical certificate.

46. *Relations between Revenue and Forest officers.*—The relations continued to be cordial. Range Officers attended the jamabandi in *South Canara and Central Coimbatore*. Such attendance was not required in *Malabar* and was not carried out in the other divisions of *Coimbatore* owing to non-communication of the jamabandi officers' programmes. In the *Nilgiris*, the Forest and Revenue Officers were in constant touch with each other.

47. *Service Books.*—These are reported to have been maintained in all districts and verified to the close of the financial year except in the *Nilgiris* where they were verified to the close of the calendar year.

48. *Tours of the Forest Member.*—The Hon'ble Mr. W. O. Horne visited *South Canara* and conferred with the Collector and District Forest Officer regarding the departmental supply of fuel to the Mangalore town, he inspected also the Kanoth range in *North Malabar*.

49. *Conservator's inspection.*—All the District Forest offices were inspected and found generally in good order; the forests of *South Malabar*, *the Nilgiris* and *South Coimbatore* and part of the forests of *Kollegal* and *North Coimbatore* were also inspected. The total number of days spent in camp was 192.

50. *Touring of District Forest Officers.*—All the officers except the District Forest Officer, *the Nilgiris*, spent in camp more than the minimum period of touring prescribed; deficiency of the excepted officer amounted to eleven days and is ascribed partly to his having been engaged in the preparation of a working plan for the plantations and partly to his numerous inspections within 5 miles of head-quarters with the Vernacular Training School. Considering the number of plantations being worked within the 5 mile radius of Ootacamund, it is advisable not to insist on the District Forest Officer spending six months outside that radius.

51. *Inspection of Range offices.*—All sale depots and range offices, except one in *South Coimbatore* were inspected. The results of the inspections were generally satisfactory.

52. *Audit of accounts of District Forest offices.*—The auditors of the Local Fund Audit establishment audited the accounts of all the offices except the *Nilgiris* which was inspected by the Assistant Accountant-General. The results are reported to be satisfactory. The accounts of the *Nilgiris* were not audited in detail during 1911–12 also.

53. *The Imperial Forest College, Dehra Dun.*—Two Rangers returned from the College with higher standard certificates and two after undergoing the third year's course. Two nominees to the Provincial Service were deputed for training.

54. *The Madras Forest College.*—Two Rangers and two Deputy Rangers were deputed for training. One of the Rangers had to be withdrawn owing to a stroke of paralysis. The services of one Deputy Ranger were dispensed with as he was removed from the College for unsatisfactory work and conduct.

55. *Vernacular Training School.*—The year's session was held in the *Nilgiris*. The health of the instructors and students was not good. Mr. Cox's remarks about the instructors are: "The two instructors have had a hard time and did their work capitally. Mr. Srinivasa Ayyangar has at his service a compound of firmness and tact which makes him an excellent instructor, capable of overcoming the many difficulties which the management of school entailed without constant reference to his superiors, and he was ably assisted by Ranger Kunhi Royan. I am sorry to say that both the instructors are ill and have had to take leave." The course was completed after the close of the year under report. Of the 27 students remaining at the close of the session, five secured first-class and the rest second-class certificates. The result of the previous session was that out of 31 students, 7 passed in the first-class and 23 in the second-class; one who was absent for more than two months was not eligible for any certificate.

CHAPTER V.—GENERAL.

56. *Realization of revenue from the usufruct of toddy yielding trees on Government wastes and poramboke lands.*—The revenue realized in *South Canara* was Rs. 2,203 against Rs. 2,625 in the previous year. Very small amounts were realized in *South Malabar*, *Kollegal* and *North Coimbatore*. The palmyras in the forests of *Central Coimbatore* were as usual leased out; the amount of the year's lease is not reported.

57. *Measures adopted to encourage the growth of manure leaf-yielding trees and shrubs.*—No steps were taken as in some districts the demand was met from private forests and unreserved and patta lands and in others such measures are not required.

58. *Supply of forest produce to meet the wants of the people—South Canara.*—The concession of free removal of thatching grass used also at times as fodder, retail sales of fuel by contractors in certain localities, and free removal of grass and leaves from a portion of the Baindur reserved forest were continued. *Malabar*—local demands are met as usual from private forests and unreserved lands. The felling and removal of bamboos, fibre, etc., were allowed on permits in *North Malabar*. The *Nilgiris*-permits were as usual issued for small timber, fuel, bamboos and other produce. The Badagas continued to obtain their annual requirement of fuel on payment of one rupee per house. The public of Coonoor and Ootacamund obtained their supply of fuel and charcoal mostly by direct delivery from the plantations. *Coimbatore*—small timber and agricultural implements were retailed in *Kollegal* through the agency of monigars and permit-issuing officers and in *North Coimbatore* from forest depots; periodical auctions were also held in the latter division. In *Central Coimbatore* the public obtained timber, fuel and bamboos from contractors to whom most of the coupes of the year were sold standing. The coupes which fetched no offers were felled departmentlly and the fuel sold in the forests at fixed rates. The distribution and sale of forest produce in *South Coimbatore* was left to contractors. Brakepoles were prepared departmentally and sold to cartmen at the heads of ghats. Permits were issued to remove, by head loads, brushwood from coupes under working in *South Canara*, *Kollegal* and *North* and *Central Coimbatore*. The quantity removed during the year in the last two districts is reported to be 9,669 and 11,670 head loads respectively; as usual the removal of fodder and thatch grass in the last named district was regulated by the issue of permits at 3 pies per head load.

59. *Grant of Cowles for the formation of casuarina plantations in sandy areas.*—There were no applications for such grants.

Rules under the Forest Act.

60. (*a*) *Timber Transit Rules.*—The rules are reported to have worked satisfactorily in *North Malabar* and the four divisions of *Coimbatore*; the interest of Government in *South Canara* is not being sufficiently safeguarded so far as the rules relate to private lands; some modifications to the rules have been proposed. In *South Malabar* the registration of property marks was enforced under the rules.

(*b*) *Rules under Section 26 of the Forest Act.*—The rules are said to have worked satisfactorily and no abuse of the privileges was brought to notice. This is natural as there is no establishment to detect abuses. *Unreserved lands under the control of the Forest Department*—11·47 acres in *North Malabar* were retransferred to the Revenue Department leaving a balance of 477 acres. There were no changes in the other districts.

(*c*) *Other Rules.*—The sandalwood transit rules in *Kollegal* and *North Coimbatore* and the game rules and the rules for the protection of fish and the regulation of fishing in the *Nilgiris* are reported to have worked well.

61. *Hill tribes.*—In *North Malabar* 80 acres of unreserved lands under the control of the Forest Department were granted free to the local ryots for ponam cultivation on condition of their supplying labour and planting the area with teak seedlings. Kurumbers in the *Nilgiri—Wynaad* have been brought under better control, but the Irulars and Kurumbers on the slopes are still a source of danger to the forests during the fire season; they cannot be controlled efficiently until the executive staff is strengthened and the two plateau ranges are split up. The Sholagar settlements in

Kollegāl and *North Coimbatore* were continued on condition of their supplying labour and collecting miscellaneous produce ; one of the defaulting settlements in *North Coimbatore* was punished by the collection of assessment on the lands leased out and another was warned of the termination of its lease. In *Central Coimbatore* the Irulars in Bolampatti forest continued to have free leases covering 127 acres in consideration of their supplying labour ; 146 acres of land were leased out to the Irulars in the Attapady valley for the same purpose.

62. *Cultivation in reserved forests—South Canara.*—One of the tenant-at-will leases covering an area of four acres was terminated ; the area of such leases remaining at the close of the year was 21 acres with an annual rent of Rs. 24. *North Malabar*—An aggregate area of 724 acres was leased out for ponam and wet cultivation on an annual rent of Rs. 1,683. The lease of four acres on an annual rent of Rs. 10 in old Amarampalam for paddy cultivation in *South Malabar* and the grant of about 150 acres in the *Nilgiris* to the Irulars and Kurumbers free of rent for cultivation were renewed. The lease for rubber cultivation in *Kollegal* continued ; the rubber cultivation being a failure, coffee was raised on the land. *North Coimbatore*—186 acres were granted for cultivation on payment of rent. The Quilon Fibre Company had the lease of Arachalur reserved forest in *Central Coimbatore* free of rent for aloe cultivation up to 1st March 1912 and had to pay rent from that date as per agreement. As the Company failed to pay the rent due, the lease was cancelled and the forest resumed after the close of the year.

LIVE AND DEAD STOCK.

63. (*a*) *Elephants.*—Twenty elephants were captured during the year and there were two births ; 19 were auctioned for Rs. 45,695, one small calf (new capture) escaped from the kraal and five died ; the number remaining at the close of the year was 117. Of the deaths, one was a calf born during the year, one a new capture which succumbed to the injuries caused by the fall, and the other three were captures of the last two years which had been ailing. All the elephants are reported to be in good condition. The mahouts who kept the elephants under their charge in good condition throughout the year were rewarded as usual.

(*b*) *Bullocks and Buffaloes.*—Eight bullocks were purchased during the year. The casualties of the year were seven deaths from old age, six destroyed being unfit for work and fifteen sold. There were 137 bullocks at the close of the year. The 49 buffaloes at the commencement of the year were increased by one purchase ; one died of old age and one was destroyed being unfit for work.

(*c*) *Veterinary establishment.*—Mr. F. X. Mascarenhas, Special Veterinary Inspector, was on leave for six months on account of illness. He and his *locum tenens* repeatedly inspected the live-stock in different localities and attended to their ailments. Mr. Mascarenhas continued to do excellent work. One Assistant Veterinary Inspector on Rs. 50 + 25 and an additional jemadar on Rs. 20 were sanctioned during the year and have been posted to the charge of the live stock in *South Coimbatore.*

(*d*) *Inventory of valuable stock.*—Stock registers are reported to have been maintained in all districts and verified at inspections.

64. *Rain gauges.*—The readings recorded during the year are given in Appendix F. The readings in *South Canara* continued to be unreliable and the accuracy of those in *Central Coimbatore* is reported to have improved.

65. *The Gass Forest Museum and the Museum garden at Coimbatore.*—The Museum was as usual open to the public throughout the year and there were 7,044 visitors against 4,464 in the previous year. Twenty-five specimens were contributed during the year. Mr. C. E. C. Fischer made a further contribution of 102 identified specimens to the herbarium.

The Museum garden was maintained as usual and Rs. 107 were realized by sale of produce. Several seedlings and plants have been raised in the beds for planting in the Forest College site. The failure of monsoon has affected the garden.

66. *Suits.*—There were no suits of importance.

COIMBATORE,
3rd October 1913.

F. A. LODGE,
Conservator of Forests, Western Circle.

ADMINISTRATION REPORT OF THE MADRAS FOREST COLLEGE, COIMBATORE, FROM 1st JULY 1912 TO 30th JUNE 1913.

Chapter I.

The office of Principal was held by Mr. F. C. L. Cowley-Brown, Deputy Conservator of Forests, throughout the year except during the period 11th March to 17th April 1913, when he was on privilege leave but directed the internal administration until 4th April 1913. The office of Principal was temporarily held by Mr. A. Wimbush, Deputy Conservator of Forests, from 4th April to 17th April 1913.

The posts of Instructors were held throughout the year by—

(1) M.R.Ry. V. Subrahmanya Ayyar Avargal, M.A., F.L.S., F.Z.S., Extra Deputy Conservator of Forests ; and

(2) M.R.Ry. K. R. Venkataramana Ayyar, Extra Assistant Conservator of Forests.

Mr. C. Srinivasa Rao, B.A., Curator of the Gass Forest Museum, was appointed Lecturer in Botany from 1st July 1912 until 20th May 1913. From the latter date a separate Curator was appointed for the museum and Mr. Srinivasa Rao became third Instructor. Sub-Assistant Surgeon, Kannan Nayar, has carried out his duties of Medical officer since the beginning of May. Havildar Arogyaswami of the 2nd Queen Victoria's Own Sappers and Miners, was appointed college havildar, drill instructor, and camp superintendent with effect from 11th July 1912.

An Imperial Instructor, Mr. A. Wimbush, Deputy Conservator of Forests, was added to the College staff on the 23rd June 1913.

The Board of Visitors met at Coimbatore during the year (on the 27th and 28th June) and passed decisions on some thirty questions raised by the Principal. The Board also paid visits to the present college, the hostels, and the new college site. The college was visited by the Hon'ble Sir John Atkinson on 12th July 1912, and by Mr. Beadon Bryant, C.S.I., late Inspector-General of Forests, on 16th January 1913.

Chapter II.

A nominal roll of students as they originally entered the college is given in Appendix I to the report. Their educational qualifications are noted against each.

After removal from the college of five students for illness, incapacity, etc., and the death of one promising student, the first year's division at the close of June 1913 was composed of 25 students (all already in Government service). The first batch of students was entirely confined to the Madras Presidency.

The following table shows the different circles from which the students were recruited and their number :—

Circles.	Number of students at time of entry, 1st July 1912.	Number of students, 30th June 1913.
Northern	8	8
Central	11	9
Southern	8	6
Western	4	2
Total ...	31	25

Remarks.—One student was granted two months' privilege leave on medicial certificate from 12th June 1913 owing to ill-health and has since been withdrawn from the college.

The proportion of European and Eurasian students to Indian students is shown in the table below :—

Circles.	Number of students on 1st July 1912.		Percentage of Europeans and Eurasians.	Number of students on 30th June 1913.		Percentage of Europeans and Eurasians.
	Europeans and Eurasians.	Indians.		Europeans and Eurasians.	Indians.	
Northern	1	7	..	1	7	
Central	2	9		1	8	
Southern	2	6		1	5	
Western	1	8		..	2	
Total ..	6	25	19	3	22	12

Chapter III.

The College course.—The college assembled on 1st July 1912 and remained at head-quarters until September 9th. During this period lectures were delivered on the following subjects :—

Sylviculture,
Physical Science (including physiography),
Geometrical drawing, survey and estimating,
Engineering,
Botany,

a short course of forest zoology was undertaken, a commencement in forest utilization was made, and a few lectures on sanitation were also given.

At least twice a week the students were drilled, and were instructed in tent-pitching, whistle signals, and fire drill by the havildar.

On Saturdays the students were taken to the new college site for practical instruction and demonstration in planting operations, *e.g.*, preparation of nurseries (including digging and watering), transplanting, and the formation and maintenance of the wind belt on the western edge of the new site. They were also shown the various building works in progress and were instructed in the strength of materials, brick-making, quality of mortar, etc. Certain of these occasions were also utilized for survey work.

The Gass Forest Museum was made full use of for demonstrations in botany, forest engineering, utilization, etc. The arboretum adjoining the museum was frequently visited for purposes of systematic botany.

From September 10th till December 20th the college was on tour at Mount Stuart (Anamalais) and at Nilambur and Nedungayam in South Malabar forest division, with a short intermediate halt at head-quarters while the Principal was on deputation at Dehra Dun. Besides general sylvicultural and botanical examination of the various types of forest met with (including coppice under standards at Sethumadai) the following special works were carried out at the request of the District Forest Officers :—

Mount Sturat.—Enumeration Surveys, planting a portion of Karianshola, record of levels and preparation of a trace of tramway, survey of site for permanent camp.

Nilambur and Nedungayam.—Enumeration and valuation surveys, markings for thinnings in two plantations: alignment, plotting, and construction of bridle ghaut, construction of an Irish bridge and approaches.

A site for the permanent camp at Nedungayam was surveyed and plotted by the students. Practice was given in rafting, in Elephant work, and at Mount Stuart in removing a captured elephant from a pit.

From Nedungayam a teak tree 192 feet high and 16 feet 8 inches in girth was visited and measured by Mr. Venkataramana Ayyar. This is not improbably the tallest teak tree in India. The timber depot at Feroke and the saw mills in Malabar were visited.

A Marathon race of some 7 miles was run off and won by student Ganapati in very creditable time.

From January 17th till March 8th the division was in camp at Bolampatti, Central Coimbatore division, at Mundanthorai in Tinnevelly division, and for a couple of days on the way back at Ayalur (Madura).

Before leaving head-quarters the Coimbatore Golf links were surveyed and plotted.

The chief works undertaken on this tour, in addition to sylvicultural and botanical expeditions, were the construction and carbonisation of a charcoal kiln, the erection of a life size model of Girder Bridge, the survey and plotting of a site for the permanent camp, and the survey of a coupe.

Towards the end of this tour the division as a whole suffered severely from ill-health—so much so that at Ayalur it was necessary to abandon the rest of the tour—and on return to head-quarters the Principal found it advisable to close the college and to advance the date of the vacation by three weeks.

During the vacation occurred the lamented death of student Cross. With reference to the circumstances attendant on the decease of this student the Principal addressed the Forest Commissioner in his No. 150 of 1913, dated 30th March 1913.

On April 9th shortly before the commencement of the hill tour term the foundation stone of the new College was laid by His Excellency the Governor in the presence of a large and representative assembly of Forest and other officers and general public. The President of the Board of Visitors and the permanent Principal were unavoidably absent, but Mr. F. A. Lodge, C.I.E. (Member of the Board of Visitors and Conservator of Forests), in an address to His Excellency ably summarised the history and present position of forest policy in this Presidency, and demonstrated the justification of the large expenditure incurred on the new Forest College.

From May 6th till June 21st the division was in camp on the Nilgiris mainly at Ootacamund. With the aid of previous reports and records the eucalyptus and conifer plantations were thoroughly and comprehensively studied. Visits were also paid to Sholas, to the Government gardens, the eucalyptus oil factory, Sims' Park at Coonoor and the Pasteur Institute. The students were practised in the manufacture of charcoal in a permanent kiln. At the desire of the District Forest-officer a road was traced round through cairn hill. Special attention was paid to the peculiar flora of the Nilgiris. The museum in the Government gardens and the observatory on Dodabetta were visited.

On return to head-quarters the Coimbatore Protestant cemetery was surveyed at the request of the Chaplain. The final examination in physical science was also held—Mr. A. W. Lushington (Member of the Board of Visitors) being present at the oral.

Periodical (written, oral and practical) examinations in all subjects were also held about every three months throughout the year. While on tour sylvicultural lectures were given almost continuously, and on the other subjects of the curriculum as circumstances dictated.

Chapter IV.

General.

The college in spite of considerable difficulties inseparable from the starting of a novel institution, has had on the whole a successful year. The temporary and somewhat cramped accommodation available and the very circumscribed environment have necessarily resulted in a considerable degree of discomfort and even of hardship, which in all cases has been met in a cheerful and uncomplaining spirit. After the arrival of the staff, the conversion of the old hospital into a temporary college and of a private house into a temporary hostel involved considerable structural alteration,

and a large expenditure of time and thought. In this matter, as well as in arranging for furniture and fixings, Mr. Subrahmanya Ayyar has displayed the knowledge, capacity and assiduity that have characterised his performance of the multifarious duties and details devolving upon him as house tutor. Similarly, at the close of the year Mr. Venkataramana Ayyar has been of great assistance in obtaining, and retaining, in spite of more than passive obstruction, the building originally ear-marked for the second hostel.

It was soon realised that the first hostel was insufficient for the accommodation of the whole division. Eight students were therefore allowed to live at the Young Men's Christian Association hostel; but the arrangement owing to the local disabilities did not work very satisfactorily, and these students have been replaced in No. 1 hostel, where owing to the casualties of the year, there is now more accommodation.

The changing of camp on tour has involved a not inconsiderable amount of discomfort—and even loss—to the students. Permanent camps, for some of which estimates have been submitted, in various parts of the Presidency are a real necessity to ensure during touring the maximum of benefit with the minimum of hardship. The difficulties have not been lessened by the peculiarly searching scrutiny of touring expenditure, followed by orders of recovery of what ought not unreasonably have been debited to Government.

As regards field work on tour the aim has been to combine with the educational requirements of the college, the execution of such projects and works as would be of most benefit to the District Forest-officers concerned. It has been laid down as a principle that all such undertakings are to be completely worked out and subsequently finished with, if necessary, a map or plate—or at least a formal record of results. But the taking of drawing boards into camp is discouraged as much as possible: practice in survey and engineering plates thereby doubtless suffers, but a more than commensurate advantage is gained by the increased opportunities for open-air education and general forest training.

Opportunity has always been taken to foster and develop the students' powers of observation and taste for natural history. With this object ant-hills have been opened and studied, a few lectures on elementary astronomy and star-compasses have been given, attention has been drawn to protective colouring, mimicry, and the struggle for existence.

By dividing up the students into sections under charge of a leader efforts have been made to ascertain which individuals had the best power of control and capacity to get work done. This important phase will be further developed by putting the individual members of the division in charge of gangs of watchers and coolies. The students have seen the cream of the forests in the south of the Presidency, including eucalyptus blocks of 400 tons per acre, blocks of pure teak worth nearly Rs. 200 per tree, and perhaps the most complete canopy in India (cupressus on cairn hill at Ootacamund). It is desirable now that they should examine under guidance a more degraded type of forest. Great stress has always been laid on the influence of forests over the climate and the sub-soil water level.

Both in head-quarters and in Camp sanitation has been made a feature of the first importance, and the latrines would perhaps bear comparison with those of any educational institution of the same status.

The raising of the standard of efficiency in this direction has resulted in passive resistance and partial boycott by the sweeper fraternity. This class, at all times hard to obtain in Coimbatore and consequently able to command their own terms, found little inducement in a service combating from the outset their vested interests in sloth and inefficiency. The problem always difficult has been rendered still more acute by the decision of the Accounts Department, that these college servants were not eligible for batta and the recent order of the Accountant-General that the batta already drawn for many months past is to be immediately refunded, threatens to precipitate a serious crisis. It has needed all the circumspection of the house tutor to partially and temporarily convince the menials that the increase of pay sanctioned by Government is an adequate compensation; and the victory is by no means assured yet.

The health of students has been the subject of careful thought. Their milk and water supplies on tour are now daily tested, and no student is sent out for field work or games if the Medical officer considers him unfit. At Ootacamund the adequate provision of warm clothing was ensured by a kit inspection.

Until the present Sub-Assistant Surgeon joined, the college suffered somewhat from a succession of Medical officers who were not altogether suitable for the post.

The senior division as at present constituted, though of not a high intellectual standard, presents a good average of endeavour. The students generally speaking are doing their best to profit by their advantages. Their knowledge of English is ample, but progress has been greatly retarded by the very mediocre attainments in mathematics of the majority. The question of insisting on a somewhat high mathematical standard for all students before entrance and of abolishing the college Mathematical course, thereby rendering available several hours a week for forest subjects proper, will be laid before the next meeting of the Board of Visitors.

The Dehra Dun manual, which has been adopted as the text-book for sylviculture, requires as soon as possible extensive modification and additions, to render it suitable for South Indian requirements. Subsequently, the Dehra manuals of Forest Utilization and Botany should be similarly adapted for the local needs. For the sylvicultural lectures recourse has been freely made to current professional literature. Forest periodicals and pamphlets are also circulated to the students.

In response to a notice issued by Mr. A. W. Lushington a sum of over Rs. 500 was collected during the year from Forest officers as a memorial to the late Charles Brasier. This sum has been accepted by the Board of Visitors as a capital fund, of which the interest is to be awarded annually to the student likely to make the best practical Forest officer.

It is understood that the Campbell Walker Prize is to be transferred from Dehra Dun to the Madras Forest College.

Physically the students for the most part are a well set up body of young men. They have been greatly handicapped by the lack of facilities for games. Their numbers were small: it was difficult to procure space: owing to the exigencies of the first year of touring the time in head-quarters was rather cut up: the initial expenses were naturally heavy, and except for a grant of Rs. 100,—funds had to be provided entirely from individual contributions. Consequently athletics during the past year have rather languished. But with the advent of the junior division and the addition of an Imperial Instructor, the outlook is now much brighter.

The necessity for a second Imperial Instructor has been accepted by the Board of Visitors and laid before the Forest Commissioner in detail.

The work of the year has been heavy for all members of the staff. It has been accentuated by the large number of necessary buildings and projects at the new site which had been omitted from the final estimates, and for the construction of preparation of which justification had to be shown and sanction obtained: *e.g.*, quarters for clerks, sub-assistant surgeon, havildars, etc., gymnasium, carpenter's shop, carriage shed, athletic pavilion and ground; and electric lighting of the buildings, etc. The labour of preparing most of these estimates with their designs devolved on the Provincial Instructors, and in particular on Mr. Venkataramana Ayyar. This work is far from complete yet, and it is not improbable that in the near future a Post and telegraph office, hospital, police station and school, all common to the Forest and Agricultural Colleges, will be required.

It is important that the Gass Forest Museum should be moved to the new site as soon as, or before, the students take up their residence there, in order that they may continuously enjoy the great advantage of studying for themselves in the museum the products, processes, and paraphernalia discussed in the lectures. It will therefore be desirable to construct a temporary and cutcha building containing two lecture rooms, instructors' rooms, and offices. Proposals will be submitted as soon as possible.

The duties and scope of superior staff cover a much larger field than that of simple lecturing. For example the preparation of the very extensive and detailed

estimates for furniture and fittings demanded by the Department of Public Works was carried out by all the officers in consultation : the laying out of avenues and the arboretum has devolved on the third Provincial Instructor, etc., etc.

The addition of a designer, freehand draughtsman and artist is a pressing necessity. Economy would be effected and efficiency probably not impaired by combining the post with that of assistant curator, photographer, and if feasible accounts lecturer.

The periodical checking of the college stores and stock already amounting to over Rs. 22,000 involves a heavy strain on the superior staff. When the transfer to the new site has been effected, the quantity and value will be so greatly increased that special arrangements will probably be necessary for its custody and for its systematic examination by professional stock-takers.

From every point of view it is a serious misfortune that the new site consists wholly of black cotton soil. The cost of the arboretum, athletic ground, and roads will as a consequence be exceptionally high as regards both capital and maintenance charges. Under the supervision of the Imperial Instructor and second Provincial Instructor, experiments are being made to ascertain what combination of artificial top-soil over the pure black cotton will yield the best practical surface for the athletic ground.

During the year the Principal was deputed to visit the Imperial Forest College at Dehra Dun and submitted to the Forest Commissioner detailed notes and recommendations, the majority of which were given effect to. The school of Military Engineering in Bangalore was visited by the second Provincial Instructor, with beneficial results to the college engineering course.

The Principal begs to place on record his lively sense of the whole-hearted devotion to the interests of the college displayed by all members of the staff.

The calls on the time, patience, energy, and tact of the house tutor in particular have been unceasing and have always met with an immediate and adequate response. The office staff under the head clerk, Mr. K. Pattabirama Ayyar, and the Storekeeper, A. Marudachallam Pillai have carried out their duties efficiently. The influence of the Havildar has been always for the good, and he has, in the opinion of the Principal, more than justified his appointment.

The cordial thanks of the Principal, staff and students are due to the District Forest officers in whose divisions the touring has been undertaken, for the erection of camps and for general and very material assistance.

It would be unbecoming to conclude the first administration report of the Madras Forest College without recording the great and ready assistance received from Mr. F. A. Lodge, C.I.E. At all times he has been prepared to place at the service of the College his experience and advice in cases of difficulty or doubt.

Of especial value has been his first hand knowledge of the history of the negotiations leading up to the starting of the college, for the very inception of which he has been mainly responsible. Before the Principal arrived the greater part of the spade work had already been undertaken and completed by Mr. F. A. Lodge, C.I.E., with the assistance of Messrs. Fischer and Subrahmanya Ayyar.

To the labours of these officers, the College, and consequently the department as a whole, are under no small obligation.

F. C. L. COWLEY-BROWN,
Principal.

18*th August* 1913.

APPENDIX I.

Madras Forest College, Coimbatore.

Class of 1912—14.

Number.	Names of students.	Circle and district to which attached.	Rank.	Educational qualifications.
		Western Circle.		
1	C. P. Garudachala Mudaliyar.	Coimbatore, South ..	Ranger V	Matriculation.
2	A. J. Lemerle	Do. North ..	Deputy Ranger II ..	*Nil.*
3	K. Karunakara Nambiar.	Malabar, South	Do. ..	Matriculation.
4	A. Nicholas	Canara, South	Ranger VI	Do.
		Southern Circle.		
5	L. R. Narayana Ayyar ..	Madura	Ranger V	Matriculation.
6	R. Subrahmanya Ayyar ..	Do.	Do. VI	*Nil.*
7	L. J. Taylor	Tinnevelly	Do. V	High School Examination.
8	S. Thungasami Cross ..	Do.	Do. VI	Matriculation.
9	R. E. Lemos	Salem, North	Do. VI	Do.
10	Muhammad Asadulla Ghatala.	Do.	Do. VI	*Nil.*
11	V. D. Ramalingham ..	Do.	Deputy Ranger II ..	Matriculation.
12	S. Sundaravaradachari ..	South Arcot	Do. ..	F.A.
		Central Circle.		
13	E. H. Roze	Cuddapah, East	Ranger V ..	*Nil.*
14	H. Tammiah	Do.	Do. VI ..	Matriculation.
15	P. S. Varadakrishnamachari.	Do.	Deputy Ranger II ..	Do.
16	C. Varadarajulu Nayudu.	Nellore	Ranger VI	Do.
17	John Martin	Anantapur	Do.	*Nil.*
18	T. T. Ansep	Do.	Do.	Matriculation.
19	S. M. Razvi	Guntūr	Do.	*Nil.*
20	M. Venkatappayya ..	Do.	Deputy Ranger II ..	Matriculation.
21	S. Chidambara Ayyar ..	Do.	Do. ..	Do.
22	S. Chinnadorai	Chittoor	Do. ..	F.A.
23	N. E. Kanakiah	Bellary	Do. ..	Matriculation.
		Northern Circle.		
24	C. S. King	Vizagapatam	Ranger VI	*Nil.*
25	N. K. Sarma	Ganjām	Deputy Ranger II ..	Matriculation.
26	M. Krishna Rao	Gōdāvari, Lower ..	Do. ..	Do.
27	B. V. Nagaraja Ayyar ..	Kurnool, South	Do. ..	Do.
28	C. G. Ganapathy ..	Do.	Do. ..	*Nil.*
29	B. Krishnaswamy Rao ..	Do.	Do. ..	*Nil.*
30	C. G. Krishna	Kurnool, West	Do. ..	Entrance Examination, Allahabad University.
31	D. Ramakrishniah ..	Do.	Do. ..	Matriculation.

APPENDIX II.

FORM No. 80.

Summary of Revenue and Expenditure of the Madras Forest College for the forest year ending with 30th June 1913.

Head of Service.	Amount. RS.	A.	P.
Receipts.			
V (b)	1,762	7	5
A. Expenditure.			
A-I (a)	— 1	9	7
(b)	— 25	4	9
(c)	— 3	9	9
A-VI (c)	7,492	11	1
A-VII (b)	1,203	12	4
(c)	5	15	0
A-VIII (e)	2,247	15	9
(g)	237	15	1
A-IX (b)	39	10	4
Total ...	11,197	8	6
B. Establishments.			
B-I (b)	25,204	10	0
(c)	15,482	8	7
(d)	1,928	9	5*
II (b)	3,992	3	11
(c)	4,972	5	7
(d)	728	5	4
III (a)	991	15	8
(b)	337	8	0
(d)	6,438	3	2
Total ...	60,076	5	8

* Includes Rs. 3-0-2 pay and famine batta of a peon on the temporary establishment.

APPENDIX III.

FORM No. 85.

Abstract showing the value of live stock, stores, tools and plant for the year ending 30th June 1913.

District.	Description of stock.	On hand at commencement of the year (on 1st July 1912).		On hand at end of the year (on 30th June 1913).		Difference in value.	
		Number.	Value.	Number.	Value.	In favour of the year.	Against the year.
			RS. A. P.		RS. A. P.	RS. A. P.	RS. A. P.
Madras Forest College, Coimbatore.	Surveying and other instruments.	569	*5,013 4 3	493	*5,115 0 3	101 12 0	..
	Tools	214	375 10 6	214	375 10 6	..	..
	Furniture	338	1,748 1 8	280	1,526 3 8	..	221 14 0
	Scientific apparatus ..	..	..	2,474	2,422 6 0	2,422 6 0	..
	Tents	..	..	84	7,995 0 3	7,995 0 3	..
	Uniforms	6	12 9 0	62	201 14 0	189 5 0	..
	Miscellaneous	58	487 8 0	406	1,363 5 9	875 13 9	..
	Total ..	1,185	7,637 1 5	4,013	18,999 8 5	11,362 7 0	..

* The value of 1 " Y " level and 1 Dumpy's level are not included in the list, as their value is not known.

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APPENDICES.

Appendix A.—District areas and Forest reserves (1912–13).

District.	(a) Total area including feudatory and tributary States.	(b) Area excluding zamindari, whole inam villages and minor inam in ryotwari tracts.	(b) Occupied area.	Particulars of remaining area (columns 3 — 4). (b) Unoccupied cultivable, uncultivable and forest areas.	(a) Areas for which records are not available.	Total of columns 5 and 6.
1	2	3	4	5	6	7
	ACS.	ACS.	ACS.	ACS.	ACS.	ACS.
Northern Circle.						
Ganjām	5,362,976	2,872,571	439,809	668,547	1,764,215	2,432,762
Vizagapatam	11,022,477	846,602	183,738	662,864	..	662,864
Gōdāvari	3,980,698	2,125,848	590,904	1,531,452	3,492	1,534,944
Kistna	3,780,254	1,640,370	1,008,951	618,533	12,886	631,419
Kurnool	4,699,447	3,904,466	1,511,886	2,392,580	..	2,392,580
Total ..	28,845,852	11,389,857	3,735,288	5,873,976	1,780,593	7,654,569
Central Circle.						
Bellary	3,656,339	2,983,587	1,959,132	1,024,455	..	1,024,455
Anantapur	4,299,968	3,714,191	1,783,319	1,930,872	..	1,930,872
Guntūr	3,670,687	2,919,944	1,848,836	1,071,108	..	1,071,108
Cuddapah	3,771,968	3,220,576	963,372	2,257,204	..	2,257,204
Nellore	5,103,053	2,326,957	945,542	1,381,415	..	1,381,415
Chingleput	1,965,283	1,287,006	674,571	612,435	..	612,435
Chittoor	3,631,782	1,757,114	457,357	1,299,757	..	1,299,757
Total ..	26,099,080	18,209,375	8,632,129	9,577,246	..	9,577,246
Southern Circle.						
North Arcot	3,033,517	2,550,140	1,092,650	1,457,490	..	1,457,490
South Arcot	2,693,229	2,413,330	1,529,027	884,303	..	884,303
Salem	(c)4,031,872	3,120,475	1,111,310	2,009,165	..	2,009,165
Trichinopoly	3,158,521	2,253,137	1,554,816	698,321	..	698,321
Tanjore	2,375,386	1,583,774	1,145,933	437,841	..	437,841
Madura	3,146,485	2,075,835	1,154,956	920,879	..	920,879
Rāmnād	3,159,226	447,166	264,987	182,179	..	182,179
Tinnevelly	2,744,237	1,796,590	1,206,568	590,022	..	590,022
Total ..	24,342,473	16,240,447	9,060,247	7,180,200	..	7,180,200
Western Circle.						
South Canara (c)	2,573,421	2,573,421	817,328	1,754,039	2,054	1,756,093
Malabar (c)	3,708,410	3,694,880	1,306,296	2,388,584	..	2,388,584
The Nilgiris	646,061	651,212	(c) 188,106	463,106	..	463,106
Coimbatore	4,989,867	4,557,986	2,512,163	2,045,823	..	2,045,823
Total ..	11,917,759	11,477,499	4,823,893	6,651,552	2,054	6,653,606
Grand Total ..	91,205,164	57,317,178	26,251,557	29,282,974	1,782,647	31,065,621

(a) Area by professional survey.

(b) Area according to village maps.

(c) Revised figure furnished by the Collector.

Appendix A.—District areas and Forest reserves (1912–13)—*cont.*

District.	Reserved forests and reserved lands.			Percentage of column 10 to column 3.	Percentage of column 10 to column 7.
	Reserved forests under Act V of 1882.	Reserved lands.	Total of reserves (columns 8 and 9).		
	8	9	10	11	12
Northern Circle.	ACS.	ACS.	ACS.		
Ganjām	360,871	47,741	408,612	14·22	16·80
Vizagapatam	193,832	6,515	200,347	23·66	30·22
Gōdāvari	532,389	111,133	643,522	30·27	41·92
Kistna	178,231	2,801	181,032	11·04	28·67
Kurnool	1,687,377	94	1,687,471	43·22	70·52
Total ..	2,952,700	168,284	3,120,984	27·40	40·77
Central Circle.					
Bellary	400,539	40,858	441,397	14·79	43·09
Anantapur	475,321	6,953	482,274	12·98	24·98
Guntūr	521,247	..	521,247	17·85	48·66
Cuddapah	1,163,437	..	1,163,437	36·12	51·54
Nellore	476,463	7	476,470	20·47	34·49
Chingleput	133,973	19	133,992	10·41	21·87
Chittoor	537,419	16	537,435	30·58	41·35
Total ..	3,708,399	47,853	3,756,252	20·63	39·22
Southern Circle.					
North Arcot	796,024	74	796,098	31·21	54·62
South Arcot	221,126	..	221,126	9·16	25·00
Salem	879,136	33,080	912,216	29·23	45·40
Trichinopoly	215,275	2,146	217,421	9·64	31·13
Tanjore	12,461	..	12,461	0·78	2·84
Madura	426,210	16	426,226	20·53	46·28
Rāmnād	46,712	44	46,756	10·45	25·66
Tinnevelly	227,586	96	227,682	12·67	38·58
Total ..	2,824,530	35,456	2,859,986	17·61	39·83
Western Circle.					
South Canara	510,563	31	510,594	19·84	29·08
Malabar	322,823	35,868	358,691	9·71	15·01
The Nilgiris	291,327	52,569	343,896	52·80	74·26
Coimbatore	1,320,271	187,922	1,508,193	33·09	73·72
Total ..	2,444,984	276,390	2,721,374	23·71	40 90
Grand Total ..	11,930,613	527,983	12,458,596	21·04	40·10

APPENDIX B.—Particulars of balance of lands under Settlement.

District.	Forest Settlement. Total number and area of blocks under settlement up to the end of 1912–13. Number.	Area.	Total number and area of blocks constituted finally as reserved forests up to the end of 1912–13. Number.	Area.	Balance at the end of 1912–13. Number.	Area.
1	2	3	4	5	6	7
		SQ. MLS.		SQ. MLS.		SQ. MLS.
Northern Circle.						
Ganjām	62	639	57	564	5	75
Vizagapatam	57	313	56	303	1	10
Gōdāvari, Upper	33	527	29	428	..4	99
Do. Lower	44	(*h*) 479	43	404	1	75
Kistna	75	278	75	278	..	..
Kurnool, East	27	1,001	27	1,001	..	..
Do. South	38	778	34	778	4	(*a*)
Do. West	43	858	42	858	1	(*a*)
Total ..	379	4,873	363	(*h*) 4,614	16	259
Central Circle.						
Bellary	171	(*b*) 627	168	626	3	1
Anantapur	139	754	136	743	3	11
Guntūr	180	814	180	814	..	..
Cuddapah, North	79	734	79	734	..	..
Do. East	67	1,083	67	1,083	..	..
Nellore	228	745	227	745	1	(*d*)
Chingleput	198	209	198	209	(*e*) ..	(*d*)
Chittoor	(*c*) 141	840	(*c*) 140	840	1	(*d*)
Total ..	1,203	5,806	1,195	5,794	8	12
Southern Circle.						
North Vellore	105	499	101	499	4	(*d*)
South do.	75	745	75	745	..	..
South Arcot	(*f*) 130	345	130	345	..	..
North Salem	78	838	77	792	1	46
South do	86	587	84	581	2	6
Trichinopoly	155	359	152	356	3	3
Madura	(*g*) 156	666	154	666	2	(*d*)
Tinnevelly	107	429	99	429	8	(*d*)
Total ..	892	4,468	872	4,413	20	55
Western Circle.						
South Canara	183	798	178	798	5	(*a*)
Malabar, North	30	262	29	261	1	1
Do. South	6	143	5	108	1	35
The Nilgiris	437	478	436	478	1	(*a*)
Kollegal	16	730	11	447	5	283
Coimbatore, North	24	922	20	921	4	1
Do. Central	50	363	45	353	5	10
Do. South	17	454	15	454	2	(*a*)
Total ..	763	4,150	739	3,820	24	330
Grand Total ..	3,237	19,297	3,169	18,641	68	656

(*a*) Less than half a square mile.
(*b*) Includes 63 square miles of Sandūr leased forests.
(*c*) Revised by the Collector.
(*d*) Less than one square mile.
(*e*) Enclosures within existing Perungoli and Nandambakam reserves.
(*f*) In the previous year's return two blocks were wrongly treated as one block.
(*g*) Includes one block notified under section 4 in the previous year but omitted to be shown as brought under settlement.
(*h*) Corrected in the Board's Office.

APPENDIX B.—Particulars of balance of lands under Settlement—*cont.*

District.	Settled and reported on.								Settled but not reported on.		Settlement proceeding.	
	Notified under section 16 during 1912–13 but reservation effected only after the 30th June 1913.		With Board or Government awaiting publication of notification under section 16.		Returned by the Board for revision, remaining either with Collector, District Forest Officer or Forest Settlement Officer.		Total settled and reported on.					
	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.
	8	9	10	11	12	13	14	15	16	17	18	19
Northern Circle.		S. M.		SQ. MLS.		SQ. MLS.		S. M.		S. M.		S. M.
Ganjām	4	5	..	..	..	..	4	5	..	..	1	70
Vizagapatam ..	..	..	..	..	..	..	..	..	..	..	1	10
Gōdāvari, Upper ..	..	..	..	..	..	..	..	..	..	..	4	99
Do. Lower.	..	..	..	..	..	..	..	..	1	75	..	..
Kistna	..	..	..	..	..	..	..	..	..	..	..	..
Kurnool, East ..	..	..	..	..	..	..	..	..	..	..	..	..
Do. South ..	..	..	1	(*a*)	..	..	1	(*a*)	1	(*a*)	2	(*a*)
Do. West ..	..	..	1	(*a*)	..	..	1	(*a*)	..	..	..	..
Total ..	4	5	2	..	..	..	6	5	2	75	8	179
Central Circle.												
Bellary	..	..	2	1	..	..	2	1	..	..	1	(*a*)
Anantapur ..	..	..	1	1	..	..	1	1	1	10	1	(*a*)
Guntūr	..	..	..	..	..	..	..	..	..	..	..	..
Cuddapah, North ..	..	..	..	..	..	..	..	..	..	..	..	..
Do. East ..	..	..	..	..	..	..	..	..	..	..	..	..
Nellore	..	..	1	(*a*)	..	..	1	(*a*)	..	..	..	..
Chingleput ..	..	..	..	..	..	..	..	..	..	..	(*b*) ..	(*a*)
Chittoor	..	..	..	..	..	..	..	..	..	..	1	(*a*)
Total ..	..	..	4	2	..	..	4	2	1	10	3	(*e*)
Southern Circle.												
North Vellore ..	..	..	..	..	..	..	..	..	1	(*a*)	3	(*a*)
South do. ..	..	..	..	..	..	..	..	..	..	..	..	..
South Arcot ..	..	..	..	..	..	..	..	..	..	..	..	..
North Salem ..	..	..	..	..	..	..	..	..	1	46	..	..
South do.	..	..	..	..	..	..	..	..	..	..	2	6
Trichinopoly ..	..	..	1	1	..	..	1	1	..	..	2	2
Madura	..	..	..	..	..	..	..	..	..	..	2	(*a*)
Tinnevelly ..	..	..	2	(*a*)	..	..	2	(*a*)	2	(*a*)	4	(*a*)
Total ..	..	..	3	1	..	..	3	1	4	46	13	8
Western Circle.												
South Canara ..	..	..	..	..	..	..	..	..	2	(*a*)	3	(*a*)
Malabar, North ..	..	..	..	..	..	..	..	..	..	..	1	1
Do. South ..	..	..	..	..	..	..	..	..	1	35	..	..
The Nilgiris ..	..	..	..	..	..	..	..	..	1	(*a*)	..	..
Kollegal	..	..	..	..	1	272	1	272	1	11	3	(*a*)
Coimbatore, North.	..	..	..	..	..	..	..	..	..	..	4	1
Do. Central.	..	..	..	..	..	..	..	..	..	..	5	10
Do. South.	..	..	..	..	..	..	..	..	1	(*a*)	1	(*a*)
Total ..	..	..	..	..	1	272	1	272	6	46	17	12
Grand Total ..	4	5	9	3	1	272	14	280	13	177	41	199

(*a*) Less than one square mile.
(*b*) Enclosures within existing Perungoli and Nandambakam reserves.

APPENDIX B.—Particulars of balance of lands under Settlement—*cont.*

District.	Of lands notified under section 4.																													
	1891–92.		1894–95.		1900–01.		1901–02.		1902–03.		1903–04.		1904–05.		1905–06.		1906–07.		1907–08.		1908–09.		1909–10.		1910–11.		1911–12.		1912–13.	
	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.	Number.	Area.
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49
Northern Circle.		S. M.		S. M.		S. M.		S. M.		S. M.		S. M.		S. M.		S. M.		S. M.		S. M.		S. M.		S. M.		S. M.		S. M.		S. M.
Ganjām ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	75	..	..
Vizagapatam ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	10	..	..	..	..
Gōdāvari, Upper ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	99
Do. Lower ..	..	..	..	..	..	..	1	75	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kistna ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kurnool, East ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Do. South ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	b1	(a)	3	(a)
Do. West ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	(a)	..	..	..	..
Total ..	..	..	..	..	..	..	1	75	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	10	6	75	7	99
Central Circle.																														
Bellary ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	1	(a)	1	(a)
Anantapur ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	10	2	1	..	..	..	..
Guntūr ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cuddapah, North ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Do. East. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nellore ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	b-1	(a)
Chingleput ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	(c)	(a)	(c)	(a)
Chittoor ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	(a)
Total ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	10	2	1	1	(b)	3	(a)
Southern Circle.																														
North Vellore ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	(a)	1	(a)	..	..	2	(a)
South do. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
South Arcot ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
North Salem ..	..	..	..	..	1	46	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
South do. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	6	..	..	..	..	..	..
Trichinopoly ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2	2	..	..	..	..	..	..
Madura ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	(a)
Tinnevelly ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	(a)	4	(a)	..	..
Total ..	..	..	..	..	1	46	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	5	8	5	(e)	4	(e)	4	(a)
Western Circle.																														
South Canara ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	(a)	3	(a)
Malabar, North ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Do. South ..	..	..	..	..	..	..	..	..	..	..	1	35	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
The Nilgiris ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	*(a)
Kollegal ..	1	272	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	11	..	..	..	..	..	..	..	..	3	*(a)
Coimbatore, North ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	d1	(a)	..	..	..	..	..	..	..	..	1	(a)	2	*(a)
Do. Central ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	(a)	4	9
Do. South ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	(a)	1	*(a)
Total ..	1	272	..	..	..	..	..	..	..	..	1	35	..	..	..	..	1	†(a)	1	11	..	..	..	..	..	..	5	*(a)	15	11
Grand Total ..	1	272	..		1	46	1	75	..	..	1	35	..	..	..	..	1	(a)	1	11	2	2	6	18	9	11	16	75	29	110

* Aggregate one square mile.

(a) Less than one square mile.
(b) Notification under section 4 cancelled after the close of the year.
(c) Enclosures within existing Perungoli and Nandambakam reserves.
(d) Renotified in 1912–13.

APPENDIX C.—Statement showing the area of reserved forests for which final maps have been prepared during 1912–13.

District.	Area of reserved forests.	Area of reserved forests for which final maps have been prepared	Remarks.
Northern Circle.	SQ. MLS.	SQ. MLS.	
Ganjām	564	564	
Vizagapatam	303	303	
Gōdāvari, Upper	428	428	
Do. Lower	404	404	
Kistna	278	153	
Kurnool, East	1,001	998	
Do. South	778	689	
Do. West	858	598	
Total ..	4,614	4,137	
Central Circle.			
Bellary	626	626	
Anantapur	743	743	
Guntūr	814	191	
Cuddapah, North	734	734	
Do. East	1,083	1,083	
Nellore	745	745	
Chingleput	209	209	
Chittoor	840	783	
Total ..	5,794	5,114	
Southern Circle.			
North Vellore	499	499	
South do.	745	578	
South Arcot	345	345	
North Salem	792	792	
South do.	581	581	
Trichinopoly	356	*335	* The Collector now reports that final maps have to be prepared for 21 square miles.
Madura	666	608	
Tinnevelly	429	420	
Total ..	4,413	4,158	
Western Circle.			
South Canara	798	681	
Malabar, North	261	..	
Do. South	108	..	
The Nilgiris	478	86	
Kollegal	447	446	
Coimbatore, North	921	919	
Do. Central	353	252	
Do. South	454	454	
Total ..	3,820	2,838	
Grand Total ..	18,641	16,247	

Appendix D.

District.	A. Fires caused by accident or through carelessness in burning fire lines.		B. Fires entering the forests by crossing exterior fire lines.		C. Fires beginning inside the reserves or fire-traced areas. Owing to carelessness or accident. By workmen employed in the forests by purchasers of forest produce and by hay cutters.		By villagers, travellers, etc., passing through the forests.		By railway engines.		By lightning or by fire-balloons.	
	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.
1	2	3	4	5	6	7	8	9	10	11	12	13
Northern Circle.												
Ganjām	..	..	..	..	..	..	..	..	..	..	..	..
Vizagapatam	1	2,000	4	1,600	6	1,334	6	12,131	..	..	..	..
Gōdāvari, Upper	..	..	9	14,919	..	..	2	355	..	..	..	..
Do. Lower	..	..	12	12,878	2	1,600	38	1,856	..	..	..	..
Kistna	3	34	..	..	..	..	9	334	..	..	..	..
Kurnool, East	..	..	..	..	..	..	6	3,855	..	..	..	..
Do. South	8	17,670	7	6,902	..	..	13	13,778	2	153	..	..
Do. West	1	·20	6	1,250	2	110	16	6,672	1	6	..	..
Total ..	13	19,704·20	38	37,549	10	3,044	90	38,981	3	159	..	..
Central Circle.												
Bellary	..	..	..	..	..		1	*..	..	..	..	..
Anantapur	1	20	..	..	..	..	1	980	..	..	..	..
Guntūr	..	..	..	..	..	..	14	1,360	..	..	..	..
Cuddapah, North ..	4	165	1	15	1	60	2	34	..	..	..	..
Do. East ..	..	.	..	..	2	12	9	1,421	..	..	..	..
Nellore	..	..	10	736	..	..		..	..	..	..	..
Chingleput	..	..	1	*..	..	..	..	..	..	..	1	*..
Chittoor	..	..	3	157	..	..	8	786	..	..	2	50
Total ..	5	185	15	908	3	72	35	4,581		..	3	50
Southern Circle.												
North Vellore	3	228	..	..	1	1	3	76	..	..	..	..
South do.	..	..	..	..	2	38	1	..	..	..	..	..
South Arcot	..	..	2	50	..	..	5	51	..	..	..	..
North Salem	2	64	..	..	..	..	6	1,572	..	..	..	..
South do.	..	..	..	..	..	..	3	335	..	..	.	..
Trichinopoly	..	..	..	..	..	..	4	195	..	..	..	..
Madura	..	..	29	4,831	..	..	1	20	..	..	..	..
Tinnevelly	2	1,460	9	1,274	..	..	3	953	..	..	5	266
Total ..	7	1,752	40	6,155	3	39	26	3,202	..	..	5	266
Western Circle.												
South Canara	3	507	56	3,193	3	33	64	2,332	..	..	15	312
Malabar, North †	..	..	2	2,550	..	..	..	..	..	..	..	..
Do South †	5	148	..	..	..	..	..	..	..	..	..	..
The Nilgiris † ..	..	..	2	110	..	..	10	1,242	4	6	..	..
Kollegal	..	..	..	..	..	..	1	60	..	..	..	..
Coimbatore, North ..	8	228	..		1	1	22	3,437	..	..	..	..
Do. Central ..	1	15	5	1,078	..	..	4	88	2	50	..	..
Do. South ..	3	1,062	8	951	12	1,120	2	42	..	..	..	..
Total ..	20	1,960	73	7,882	16	1,154	103	7,201	6	56	15	312
Grand Total ..	45	23,601	166	52,494	32	4,309	254	53,965	9	215	23	628
Grand Total for 1911–12 ..	57	3,808	177	215,707	29	9,144	304	141,267	3	8	2	9

* Less than one acre.

† Includes the number of fires in the areas not under special protection.

Appendix D—*cont.*

District.	C. Fires beginning inside the reserves or fire-traced areas—*cont.*								Causes unknown.		Total of A, B and C and causes unknown.	
	By intentional firing.						Total.					
	In order to obtain new grass.		In order to turn out game or to reduce cover.		Maliciously fired.							
	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.
	14	15	16	17	18	19	20	21	22	23	24	25
Northern Circle.												
Ganjām	..	..	..	..	3	105	3	105	92	51,354	95	51,459
Vizagapatam	2	1,360	..	..	..	..	14	14,825	8	699	27	19,124
Gōdāvari, Upper ..	..	..	1	3,200	..	..	3	3,555	12	100,531	24	119,005
Do. Lower ..	..	..	..	.	..	..	40	3,456	11	3,272	63	19,606
Kistna	..	..	..	..	..	..	9	334		..	12	368
Kurnool, East	2	1,290	..	..	..	..	8	5,145	22	97,986	30	103,131
Do. South	..	..	..	..	..	..	15	13,931	28	19,183	58	57,686
Do. West	4	135	..	..	6	44,012	29	50,935	29	69,245	65	121,430
Total ..	8	2,785	1	3,200	9	44,117	121	92,286	202	342,270	374	491,809
Central Circle.												
Bellary	1	70	..	..	1	9	3	79	33	15,211	36	15,290
Anantapur	2	1,830	..	..	1	640	4	3,450	123	38,634	128	42,104
Guntūr	..	..	..	..	..	..	14	1,360	..		14	1,360
Cuddapah, North ..	12	2,380	.	..	5	3,786	20	6,260	36	9,922	61	16,362
Do. East	47	10,047	..	..	2	3,060	60	14,540	25	5,940	85	20,480
Nellore	2	1,667	..	..	..		2	1,667	1	115	13	2,518
Chingleput	..	..	..	..	..	..	1	*..	..	..	2	*..
Chittoor	15	451	..	..	7	582	32	1,869	10	464	45	2,490
Total ..	79	16,445	..	..	16	8,077	136	29,225	228	70,286	384	100,604
Southern Circle.												
North Vellore	7	312	..	..	..	..	11	389	19	1,520	33	2,137
South do.	16	640	..	..	2	25	21	703	5	4:0	26	1,113
South Arcot	..	..	..	..	..	..	5	51	..	..	7	101
North Salem	4	162	1	30	..	..	11	1,764	4	425	17	2,253
South do.	..	..	..	.	2	2	5	337	43	1,160	48	1,497
Trichinopoly	..	..	..	..	1	20	5	215	2	23	7	238
Madura	9	1,630	1	200	7	3,290	18	5,140	31	1,239	78	11,210
Tinnevelly	3	3,650	8	2,670	..	..	19	7,539	4	1,717	34	11,990
Total ..	39	6,394	10	2,900	12	3,337	95	16,138	108	6,494	(*a*)250	30,539
Western Circle.												
South Canara	14	308	13	613	19	729	128	4,327	22	449	209	8,476
Malabar, North † .. .	..	..	..	..	1	..	1	..	1	11	4	2.561
Do. South †	1	6	..		..	..	1	6	1	4	7	158
The Nilgiris †	..	..	6	4,560	2	402	22	6,210	27	140	51	6,460
Kollegal	1	5,120	..	..	1	..	3	5,180	16	7,285	19	12,465
Coimbatore, North ..	1	100	3	479	1	40	28	4,057	16	961	52	5,246
Do. Central ..	3	9	..	..	6	614	15	761	11	378	32	2,232
Do. South ..	12	183	1	..	1	60	28	1,405	5	101	44	3,519
Total ..	32	5,726	23	5,652	31	1,845	226	21,946	99	9,329	418	41,117
Grand Total ..	158	31,350	34	1,1752	68	57,376	578	159,595	637	428,379	1,426	664,069
Grand Total for 1911–12.	293	149,208	35	11,336	133	62,906	799	373,878	660	345,251	1,693	938,644

(*a*) Excludes seven cases of fire in unreserves.

* Less than one acre. † Includes the number of fires in the areas not under special protection.

Appendix E.—Comparative statement of impounded cattle.

Districts.	From open forests.		From closed forests.				Total.		Average for three years ending 1912–13.
			Holding permits for open forests.	Having no permits.	Holding permits for open forests.	Having no permits.			
	1911–12.	1912–13.	1911–12.		1912–13.		1911–12.	1912–13.	
Northeren Circle.									
Ganjām ..	3,273	1,883	..	240	..	290	3,513	2,173	3,791
Vizagapatam ..	1,034	786	..	1,209	..	80	2,243	886	2,536
Gōdāvari, Uppper	329	53	..	379	..	..	708	53	240
Do. Lower	549	513	..	704	312	418	1,253	1,243	1,258
Kistna	2,881	1,891	274	897	686	1,146	4,052	3,723	3,810
Kurnool, East ..	7,201	4,210	..	..	..	..	7,201	4,210	3,313
Do. South ..	6,374	1,614	162	681	121	246	7,217	1,981	8,296
Do. West ..	8,904	9,418	..	1,792	..	1,514	10,696	10,932	13,462
Total ..	30,545	20,368	436	5,902	1,119	3,694	36,883	25,181	36,706
Central Circle.									
Bellary ..	9,773	13,671	1,625	3,812	2,100	3,204	15,210	18,975	14,441
Anantapur ..	7,430	8,469	355	1,280	210	2,131	9,065	10,810	9,001
Guntūr ..	11,204	16,576	4,484	10,703	..	10,263	26,391	26,839	27,292
Cuddapah, North.	3,771	3,982	170	3,210	327	2,071	7,151	6,380	7,782
Do. East ..	2,616	2,425	84	2,922	65	3,188	5,622	5,678	5,392
Nellore ..	11,045	8,361	1,350	5,392	3,714	6,838	17,787	18,913	18,729
Chingleput ..	2,714	3,526	1,055	839	42	654	4,608	4,222	4,467
Chittoor	5,427	3,605	268	4,184	1,731	2,964	9,879	8,300	9,453
Total ..	53,980	60,615	9,391	32,342	8,189	31,313	95,713	100,117	96,557
Southern Circle.									
North Vellore ..	7,044	6,487	..	2,395	620	2,054	9,439	9,161	10,068
South do. ..	5,851	4,736	28	805	760	1,683	6,684	7,179	6,963
South Arcot ..	12,795	12,363	298	1,114	295	2,451	14,207	15,109	13,936
North Salem ..	2,269	3,036	315	1,331	206	1,190	3,915	4,432	3,392
South do. ..	1,161	2,201	330	978	220	1,900	2,469	4,321	3,337
Trichinopoly ..	7,008	6,321	560	..	1,508	..	7,568	7,829	7,226
Madura	3,340	3,720	243	3,986	294	2,590	7,569	6,604	7,955
Tinnevelly *cum* Rāmnād.	1,647	1,168	338	2,298	137	702	4,283	2,007	4,531
Total ..	41,115	40,032	2,112	12,907	4,040	12,570	56,134	56,642	57,408
Western Circle.									
South Canara ..	1,053	887	..	37	11	89	1,090	987	973
Malabar, North ..	17	95	3	240	..	..	260	95	130
Do. South ..	..	..	..	210	..	164	210	164	171
The Nilgiris ..	258	372	40	160	160	103	458	635	585
Kollegal ..	1,984	2,930	487	675	249	359	3,146	3,538	2,881
Coimbatore, North.	2,822	4,058	..	484	168	1,111	3,306	5,337	4,082
Do. Central.	595	933	..	1,547	..	1,709	2,142	2,642	2,285
Do. South.	537	131	..	282	26	613	819	770	763
Total ..	7,266	9,406	530	3,635	614	4,148	11,431	14,168	11,870
Grand Total ..	132,906	130,421	12,469	54,786	13,962	51,725	200,161	196,108	202,541

ANNUAL FORM No. 65.

Forest Department, Madras Presidency.

AREA of reserved forests and reserved lands during 1912–13.

District.	Area of reserved forests.					
	Area on the 1st July 1912.		Added during the year.	Excluded during the year.	Area on the 30th June 1913.	
	Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.
1	2	3	4	5	6	7
Northern Circle.						
Ganjām	360,871	564	..	..	360,871	564
Vizagapatam	193,487	302	345	..	193,832	303
Gōdāvari, Upper	273,746	428	(a) 5	..	273,751	428
Do. Lower	260,692	407	..	(a) 2,054	258,638	404
Kistna	178,231	278	..	..	178,231	278
Kurnool, East	640,439	1,001	..	..	640,439	1,001
Do. South	497,660	778	4	..	497,664	778
Do. West	549,274	858	..	..	549,274	858
Total ..	2,954,400	4,616	354	2,054	2,952,700	4,614
Central Circle.						
Bellary	400,547	626	..	8	400,539	626
Anantapur	480,472	751	332	5,483	475,321	743
Guntūr	521,247	814	..	..	521,247	814
Cuddapah, North	470,073	734	.	..	470,073	734
Do. East	693,364	1,083	..	..	693,364	1,083
Nellore	474,328	741	3,812	1,677	476,463	745
Chingleput	133,988	209	1	16	133,973	209
Chittoor	537,405	(b) 840	14	..	537,419	840
Total ..	3,711,424	(b) 5,798	4,159	7,184	3,708,399	5,794
Southern Circle.						
North Vellore	319,170	499	..	..	319,170	499
South do.	476,847	745	..	..	476,847	745
South Arcot	221,126	345	..	..	221,126	345
North Salem	507,162	792	212		507,374	792
South do.	371,767	581	..	5	371,762	581
Trichinopoly	227,736	356	..	.	227,736	356
Madura	426,128	666	82	..	426,210	666
Tinnevelly *cum* Rāmnād	273,647	428	652	1	274,298	429
Total ..	2,823,583	4,412	946	6	2,824,523	4,413
Western Circle.						
South Canara	509,853	797	710	..	510,563	798
Malabar, North	167,361	262	..	..	167,361	† 261
Do South	69,263	108	..	..	69,263	108
The Nilgiris*	306,122	478	..	240	305,882	478
Kollegal	286,193	447	61	..	286,254	447
Coimbatore, North	589,394	921	3	188	589,209	921
Do. Central	196,360	307	29,499	35	225,824	353
Do. South	290,628	454	..	..	290,628	454
Total ..	2,415,174	3,774	30,273	463	2,444,984	3,820
Grand Total, Presidency ..	11,904,581	18,600	35,732	9,707	11,930,606	18,641

* Includes 2,930 acres of Toda patta lands. † Fraction omitted to round off total.

(a) Rectification of area due to adoption of India Survey figures.

(b) Difference between the closing and opening balance is due to conversion of acres into square miles.

Area of reserved forests and reserved lands during 1912–13—*cont.*

District.	Area of reserved lands.						Total area of reserved forests and reserved lands.
	Area on the 1st July 1912.		Added during the year.	Excluded during the year.	Area on the 30th June 1913.		
	Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.	
	8	9	10	11	12	13	14
Northern Circle.							SQ. MLS.
Ganjām	47,741	75	..		47,741	75	639
Vizagapatam	6,860	11	..	345	6,515	10	313
Gōdāvari, Upper	..	..	63,178	..	63,178	99	527
Do. Lower	47,955	75	..	..	47,955	75	479
Kistna	2,801	4	..	..	2,801	4	282
Kurnool, East	..	..	..	..	..	..	1,001
Do. South	70	..	22	4	88	..	778
Do. West	6	..	..	..	6	..	858
Total ..	105,433	165	63,200	349	168,284	263	4,877
Central Circle.							
Bellary	40,985	64	23	150	40,858	64	690
Anantapur	7,012	11	..	59	6,953	11	754
Guntūr	..	..	..	.	..	..	814
Cuddapah, North	620	1	..	620	..	..	734
Do. East	..	..	..	..	..	..	1,083
Nellore	..	..	7	..	7	..	745
Chingleput	10	..	9	..	19	..	209
Chittoor	14	..	16	14	16	..	840
Total ..	48,641	76	55	843	47,853	75	5,869
Southern Circle.							
North Vellore	8	..	72	..	80	..	499
South do.	..	..	..	..	..	..	745
South Arcot	..	..	..	..	..	..	345
North Salem	* 29,309 + 193	46	..	212	29,290	46	838
South do.	3,790	6	..	..	3,790	6	587
Trichinopoly	2,146	3	..	..	2,146	3	359
Madura	37 + 45	..	16	82	16	..	666
Tinnevelly *cum* Rāmnād	792	1	..	652	140	..	429
Total ..	36,320	56	88	946	35,462	55	4,468
Western Circle.							
South Canara	62,615	98	24	62,608	31	..	798
Malabar, North	22	..	623	..	645	1	262
Do. South	35,223	55	..	..	35,223	55	163
The Nilgiris	52,530	82	49	10	52,569	82	560
Kollegal	165,063	258	15,982	2	181,043	283	730
Coimbatore, North	278	..	494	3	769	1	922
Do. Central	30,585	48	5,853	30,352	6,086	10	363
Do. South	16	..	8	..	24	..	454
Total ..	346,332	541	23,033	92,975	276,390	432	4,252
Grand Total, Presidency ..	536,726	838	86,376	95,113	527,989	825	19,466

* The increase of 193 acres is due to the correct area of Bianurmalai extension being 203 acres instead of 10 acres as shown in the previous return.

AREA of reserved forests and reserved lands during 1912–13.

District.	Name of forest.	Area on 1st July 1912. Acres.	Area on 1st July 1912. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1913. Acres.	Area on 30th June 1913. Equivalent in square miles.	Number and date of notification of addition or transfer.
	NORTHERN CIRCLE.							
	Reserved forests.							
Ganjam.	Area notified in previous years.	360,871	564	..	..	360,871	564	
	Reserved lands not transferred to reserved forests during the year.							
Ganjam.	Area notified in previous years.	47,741	75	..	..	47,741	75	
	Reserved forests.							
Vizagapatam.	Area notified in previous years ..	193,487	302	..	..	193,487	302·32	
	Added—Pulugumala	..	..	170	..	170	0·54	No. 511, dated 18th November 1912.
	Gemulabanda	..	..	175	..	175		
	Total ..	193,487	302	345	..	193,832	302·86 or 303	
	Reserved lands not transferred to reserved forests during the year.							
Vizagapatam.	Area notified in previous years ..	6,860	10·54 or 11	..	..	6,860	10·54	
	Excluded—Pulugumala ..	..	..	..	170	170	0·54	
	Gomulabanda ..	..	..	..	175	175		
	Total ..	6,860	10·54 or 11	..	345	6,515	10	
	Reserved forests.							
Gōdāvari, Upper.	Area notified in previous years.	273,746	428	..	..	273,746	428	
	Added—Rēkapalli	..	..	(a) 5·00	..	5·00	0·01	(a) Rectification of area due to adoption of India Survey figures.
	Total ..	273,746	428	5·00	..	273,751·00	428·01 or 428	
	Reserved lands not transferred to reserved forests during the year.							
Gōdāvari, Upper.	Area notified in previous years.	..	..	..	..	..	..	
	Added—Peddamedisileru block.	..	..	61,747·20	..	61,747·20	96·48	No. 535, dated 24th December 1912.
	Pedakonda Extension I.	..	..	788·00	..	788·00	1·23	No. 455, dated 1st October 1912.
	Tolluvada Extension V.	..	..	318·00	..	318·00	0·50	No. 163, dated 20th March 1913.
	Enukuru Extension II.	..	..	325·00	..	325·00	0·50	No. 455, dated 1st October 1912.
	Total ..	..	..	63,178·20 or 63,178	..	63,178·20 or 63,178	98·71 or 99	
	Reserved forests.							
Gōdāvari, Lower.	Area notified in previous years ..	260,692	407	..	..	260,692	407	
	Excluded—Papikonda	..	..	..	894	894	1·40	Rectification of area due to adoption of India Survey figures.
	Kopalli	..	..	..	404	404	0·63	
	Kovvada	..	..	..	756	756	1·18	
	Total ..	260,692	407	..	2,054	258,638	403·79 or 404	
	Reserved lands not transferred to reserved forests during the year.							
Gōdāvari, Lower.	Area notified in previous years ..	47,955	75	..	..	47,955	75	

Area of reserved forests and reserved lands during 1912–13—*cont.*

District.	Name of forests.	Area on 1st July 1912. Acres.	Area on 1st July 1912. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1913. Acres.	Area on 30th June 1913. Equivalent in square miles.	Number and date of notification of addition or transfer.
	NORTHERN CIRCLE—*cont.*							
	Reserved forests.							
Kistna.	Area notified in previous years..	178,231	278	..	..	178,231	278	
	Reserved lands not transferred to reserved forests during the year.							
Kistna.	Area notified in previous years..	2,801	4	..	..	2,801	4	
	Reserved forests.							
Kurnool, East.	Area notified in previous years..	640,439	1,001	..	..	640,439	1,001	
	Reserved lands transferred to reserved forests during the year—Nil.							
	Reserved forests.							
Kurnool, South.	Area notified in previous years..	497,660	778	..	..	497,660	778	
	Added— Velgonda North Addition No. II.	..	..	3·82 or 4	..	3·82 or 4	0·006	No. 11, dated 17th December 1912.
	Total ..	497,660	778	3·82 or 4	..	497,664	778·006 or 778	
	Reserved lands not transferred to reserved forests during the year.							
	Area notified in previous years..	69·82 or 70	0·109 or 0·11	..	..	69·82 or 70	0·109 or 0·11	
	Added— Owk Extension II	..	..	4·45	..	4·45	0·01	No. 322, dated 1st July 1912.
	Jaladurgam Extension I ..	..	..	5·46	..	5·46	0·01	No. 10, dated 17th December 1912.
	Do. II ..	..	..	12·02	..	12·02	0 02	
	Total ..	70	0·11	21·93	..	91·93	0·15	
	Excluded— Velgonda North Addition No. II.	..	..	..	3·82 or 4	3·82 or 4	0·006	
	Total ..	70	0·11	21·93 or 22	3·82 or 4	88·11 or 88	0·144 or 0·14	
	Reserved forests.							
Kurnool, West.	Area notified in previous years..	549,274	858	..	..	549,274	858	
	Reserved lands not transferred to reserved forests during the year.							
Kurnool, West.	Area notified in previous years..	* 6	0·009	..	..	6	0·009	* This is the area notified in No. 364, dated 8th August 1912, for which wrong boundary description was given in No. 594, dated 19th October 1910.
	CENTRAL CIRCLE.							
	Reserved forests.							
Bellary ..	Area notified in previous years ..	400,547	626	..	8	400,539	626	Disafforested—*vide* G.O. No. 2533, Revenue, dated 22nd August 1912.

Area of reserved forests and reserved lands during 1912-13—*cont.*

District.	Name of forest.	Area on 1st July 1912. Acres.	Area on 1st July 1912. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1913. Acres.	Area on 30th June 1913. Equivalent in square miles.	Number and date of notification of addition or transfer.
	CENTRAL CIRCLE—*cont.*							
	Reserved lands not transferred to reserved forests during the year.							
Bellary —*cont.*	Area notified in previous years ..	40,985	64	..	150	40,835	64	Excluded at Settlement.
	Enclosures to Neraniki reserved forest.	..	..	23	..	23	..	G.O. No. 787, Revenue, dated 15th March 1913.
	Total ..	40,985	64	23	150	40,858	64	
	Reserved forests.							
Anantapur.	Area notified in previous years ..	480,472	751	..	..	480,472	751	
	Add—Additions to Agraharam reserved forests.	..	..	0·21	..	0·21	..	G.O. No. 2755, Revenue, dated 12th September 1912.
	Add—Additions to Cherlapalli reserved forest.	..	..	0·08	..	0·08	..	Do.
	Vengalammacheruvu extension..	..	..	58·81	..	58·81	..	G.O. No. 2932, Revenue, dated 30th September 1912.
	As per Collector's revised areas owing to wrong calculations,etc.	..	..	273·42	..	273·42	..	
	Total ..	480,472	751	332	..	480,804	751	
	Deduct—Ramagiri east and west reserves.	..	..	..	5,483	5,483	8	Disafforested—*vide* G.O. No. 194, Revenue, dated 18th January 1913.
	Net area ..	480,472	751	332	5,483	475,321	743	
	Reserved lands not transferred to reserved forests during the year.							
	Area notified in previous years ..	7,012	11	..	..	7,012	11	
	Deduct	..	..	..	59	59	..	Transferred to reserved forests.
	Net area ..	7,012	11	..	59	6,953	11	
	Reserved forests.							
Guntūr	Area notified in previous years ..	521,247	814	..	..	521,247	814	
	Reserved lands not transferred to reserved forests during the year —Nil.							
	Reserved forests.							
North Cuddapah.	Area notified in previous years ..	470,073	734	..	..	470,073	734	
	Reserved lands not transferred to reserved forests during the year.							
	Area notified in previous years ..	620	1	..	..	620	1	
	Excluded—Potipad tope extension and Penagovi tope.	..	..	..	620	620	1	Notification under section 26 was cancelled by the Collector.
	Total ..	620	1	..	620	..	..	
	Reserved forests.							
East Cuddapah.	Area notified in previous years ..	693,364	1,083	..	..	693,364	1,083	
	Reserved lands not transferred to reserved forests during the year—Nil.							
	Reserved forests.							
Nellore.	Area notified in previous years ..	474,328	741	..	..	474,328	745	Due to verification of maps and accurate computation of areas in connection with the preparation of the Nellore range working plan.
	Additions and exclusions in areas.	..	..	* 3,812	† 1,677	2,135		
	Net area ..	474,328	741	3,812	1,677	476,463	745	

* Includes 9·05 acres on account of the correct area of the Ugumudi reserved forest transferred from Chingleput.

† 1,642 acres on account of correct computation, etc. of areas.
0·23 disafforested in G.O. No. 1676, dated 2nd June 1911, omitted to be shown in last year's return.
8·50 }
26·00 } " " " 2003, " 5th July 1912.
1,676·73

Area of reserved forests and reserved lands during 1912–13—*cont.*

District.	Name of forest.	Area on 1st July 1912. Acres.	Area on 1st July 1912. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1913. Acres.	Area on 30th June 1913. Equivalent in square miles.	Number and date of notification of addition or transfer
	CENTRAL CIRCLE—*cont.*							
	Reserved lands not transferred to reserved forests during the year.							
Nellore—*cont.*	Addition to Utukur-Varini Block C.	..	..	7	..	7	..	Notified under section 4 in G.O. No. 2003, Revenue, dated 5th July 1912. The notification was cancelled after the close of the year.
	Reserved forests.							
Chingleput	Area notified in previous years ..	133,988	209	..	..	133,988	209	
	Add	..	..	1	..	1	..	Due to difference in not taking ·92 acre as 1 acre in the opening balance of 1911–12.
	Total ..	133,988	209	1	..	133,989	209	
	Deduct—Area of Nandambakkam reserved forest.	..	..	..	7	7	..	Disafforested — G.O. No. 3368, Revenue, dated 7th November 1912.
	Difference in the correct area of the Ugumudi reserved forest transferred to Nellore district.	..	..	..	9	9	..	
	Net area ..	133,988	209	1	16	133,973	209	
	Reserved lands not transferred to reserved forests during the year.							
	Area notified in previous years ..	10	..	..	..	10	..	
	Add—Nandambakkam extension II.	..	..	9	..	9	..	
	Total .	10	..	9	..	19	..	
	Reserved forests.							
Chittoor.	Area notified in previous years ..	537,405	* 840	..	..	537,405	840	
	Add—Chases Hill addition ..	..	..	7	..	7	..	G.O. No. 693, Revenue, dated 7th March 1913.
	Chittoor addition	..	..	2	..	2	..	G.O. No. 2954, Revenue, dated 2nd October 1912.
	Whiteside garden extension ..	..	..	5	..	5	..	G.O. No. 851, Revenue, dated 20th March 1913.
	Total ..	537,405	840	14	..	537,419	840	
	Reserved lands not transferred to reserved forests during the year.							
	Area notified in previous years ..	14	..	..	..	14	..	
	Add—Bommasamudram C. addition.	..	..	16	..	16	..	G.O. No. 1749, Revenue, dated 12th June 1913.
	Total ..	14	..	16	..	30	..	
	Deduct—Chases Hill addition ..	..	..	..	7	7	..	
	Chittoor Addition	..	..	..	2	2	..	
	Whiteside garden extension ..	..	..	..	5	5	..	
	Net area ..	14	..	16	14	16	..	
	SOUTHERN CIRCLE.							
	Reserved forests.							
North Vellore.	Area notified in previous years ..	319,170	499	..	..	319,170	499	
	Reserved lands not transferred to reserved forests during the year.							
	Area notified in previous years ..	8	..	..	..	..	..	
	Added—							
	Sholavaram (S. Nos. 2-A, 10-A, 12, 18 and 24-A.	..	..	18	..	..	..	G.O. No. 3697, Revenue, dated 10th December 1912.
	Karapattu extension	..	..	54	..	..	..	G.O. No. 832, Revenue, dated 18th March 1913.
	Total ..	8	..	72	..	80	..	

* Difference due to incorrect calculation of acres into square miles in the last year's closing balance.

Area of reserved forests and reserved lands during 1912–13—*cont.*

District.	Name of forest.	Area on 1st July 1912. Acres.	Area on 1st July 1912. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1913. Acres.	Area on 30th June 1913. Equivalent in square miles.	Number and date of notification of addition or transfer.
	Southern Circle—*cont.*							
	Reserved forests.							
South Vellore.	Area notified in previous years ..	476,847	745	..	..	476,847	745	
	Reserved lands not transferred to reserved forests during the year—Nil.							
	Reserved forests.							
South Arcot.	Area notified in previous years ..	221,126	345	..	..	221,126	345	
	Reserved lands not transferred to reserved forests during the year—Nil.							
	Reserved forests.							
North Salem.	Area notified in previous years ..	507,162	792	..	..	..	..	
	Added—							
	Bianurmalai extension	..	..	203	..	..	..	G.O. No. 729, Revenue, dated 10th March 1913.
	Sanamavu extension	..	..	9	..	..	..	G.O. No. 899, Revenue, dated 27th March 1913.
	Total ..	507,162	792	212	.	507,374	792	
	Reserved lands not transferred to reserved forests during the year.							
	Area notified in previous years ..	* 29,502	46	..	..	..	..	
	Excluded—							
	Transferred to reserved forests.	..	..	..	212	..	..	
	Net area ..	29,502	46	..	212	29,290	46	
	Reserved forests.							
South Salem.	Area notified in previous years ..	371,767	581	..	..	..	..	
	Excluded—							
	Mailapuram extension	..	..	..	5	..	..	G.O. No. 1236, Revenue, dated 28th April 1913.
	Net area ..	371,767	581	..	5	371,762	581	
	Reserved lands not transferred to reserved forests during the year.							
	Area notified in previous years ..	3,790	6	..	..	3,790	6	
	Reserved forests.							
Trichinopoly.	Area notified in previous years ..	227,736	356	..	..	227,736	356	
	Reserved lands not transferred to reserved forests during the year.							
	Area notified in previous years ..	2,146	3	..	..	2,146	3	
	Reserved forests.							
Madura.	Area notified in previous years ..	426,128	666	..	..	..	..	
	Added during the year—							
	Mankaradu	..	..	6·32	..	..	..	G.O. No. 2960, Revenue, dated 3rd October 1912.
	Northern slopes	..	..	45·44	..	..	..	G.O. No. 3791, Revenue, dated 19th December 1912.
	Perumalmalai	..	..	1·48	..	..	..	G.O. No. 3181, Revenue, dated 24th October 1912.
	Gunder valley extension ..	..	..	28·76	..	..	..	G.O. No. 2334, Revenue, dated 2nd August 1912.
	Total ..	426,128	666	82	..	426,210	666	

* *Vide* remarks in abstract of Form No. 65.

Area of reserved forests and reserved lands during 1912–13—*cont.*

District.	Name of forest.	Area on 1st July 1912. Acres.	Area on 1st July 1912. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1913. Acres.	Area on 30th June 1913. Equivalent in square miles.	Number and date of notification of addition or transfer.
	SOUTHERN CIRCLE—*cont.*							
	Reserved lands not transferred to reserved forests during the year.							
Madura—*cont.*	Area notified in previous years ..	* 82	..	..	..	..	..	
	Added—							
	Southern slopes Palni Hills.	..	..	8·81	..	..	..	G.O. No. 3013, Revenue, dated 5th October 1912.
	Kokkuparai	..	..	7·60	..	..	..	G.O. No. 1705, Revenue, dated 14th June 1913.
	Excluded—							
	Transferred to reserved forests.	..	..	..	82	..	..	
	Net area ..	82	..	16·41 or 16	82	16·41 or 16	..	
	Reserved forests							
Tinnevelly *cum* Rāmnād.	Area notified in previous years ..	273,647	428	..	..	..	..	
	Additions—							
	Srīvilliputtūr ghat reserve No. V (*a*) S. Nos. 1861 B of Valaikulam and 2359 of Kollankondan.	..	..	27·45	..	..	..	G.O. No. 3826, Revenue, dated 23rd December 1912.
	Valaikulam Parambu extension.	..	..	34·33	..	..	..	G.O. No. 1642, Revenue, dated 4th June 1912.
	Addition to Srīvilliputtūr ghat forest V (*a*)—							
	Sundrapandiam village ..	..	..	34·52	..	..	..	G.O. No. 1641, Revenue, dated 4th June 1912.
	Venkataswarapuram ..	..	..	34·54	..	..	..	G.O. No. 1779, Revenue, dated 17th June 1912.
	Pudupatti	..	..	49·16	..	..	..	G.O. No. 1635, Revenue, dated 4th June 1912.
	Lakshimipuram	..	..	35·60	..	..	..	G.O. No. 836, Revenue, dated 19th March 1913.
	Addition to Puliangudi, Chintamani, Vasudevanallur ghat forests IV (*a*) in Tirumalapuram.	..	..	2·23	..	..	..	G.O. No. 2959, Revenue, dated 3rd October 1912.
	Nāranapuram	..	..	7·07	..	..	..	G.O. No. 2961, Revenue, dated 3rd October 1912.
	Melpuliangudi	..	..	8·83	..	..	..	G.O. No. 2812, Revenue, dated 19th September 1912.
	Vasudevanallur	..	..	18·29	..	..	..	G.O. No. 2811, Revenue, dated 19th September 1912.
	Mela Chintamani	..	..	6·21	..	..	..	G.O. No. 2962, Revenue, dated 3rd October 1912.
	Kottamalai reserve addition ..	..	..	121·87	..	..	..	G.O. No. 3516, Revenue, dated 21st November 1912.
	Additions to Vadagarai Melpadagai reserved forest III.	..	..	70·96	..	..	..	G.O. No. 2907, Revenue, dated 27th September 1912.
	Additions to Krishnapuram extension.	..	..	12·42	..	..	..	G.O. No. 3225, Revenue, dated 29th October 1912.
	Kuttalam reserved forest III Old Survey No. 1357 E Ilanji village.	..	..	31·51	..	..	..	G.O. No. 179, Revenue, dated 17th January 1913.
	Addition II to Kottamadakki ..	..	..	156·60	..	..	..	G.O. No. 1083, Revenue, dated 10th April 1913.
	Excluded—							
	Papanasam Alwarkurichi ghat forest lower slopes II (*b*).	..	..	..	0·56	..	..	G.O. No. 3244, Revenue dated 30th October 1912.
	Total ..	273,647	428	651·59 or 652	0·56 or 1 acre.	274,298	429	

* *Vide* remarks in abstract of Form No. 65

Area of reserved forests and reserved lands during 1912–13—*cont.*

District.	Name of forest.	Area on 1st July 1912. Acres.	Area on 1st July 1912. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1913. Acres.	Area on 30th June 1913. Equivalent in square miles.	Number and date of notification of addition or transfer.
	SOUTHERN CIRCLE—*cont.*							
	Reserved lands not transferred to reserved forests during the year.							
Tinnevelly cum Ramnad—cont.	Area notified in previous years.	792	1	..	..	..	..	
	Transferred to reserved forests ..	..	..	..	652	..	..	
	Net area ..	792	1	..	652	140	..	
	WESTERN CIRCLE.							
	Reserved forests.							
South Canara.	PUTTUR.							
	Kalanjimale addition	..	..	6	..	6	..	No. 347, dated 19th July 1912.
	KASARAGOD.							
	Parappa addition II	..	..	(a)	..	(a)	..	No. 475, dated 29th October 1912.
	Area notified in previous years ..	509,853	..	(b) 704	..	510,557	..	
	Total ..	509,853	797	710	..	510,563	798	
	Reserved lands not transferred to reserved forests during the year.							
	PUTTUR.							
	Aletti addition I	..	..	4	..	4	..	No. 474, dated 29th October 1912.
	Do. do. II	..	..	14	..	14	..	No. 218, dated 6th May 1913.
	Do. do. III	..	..	6	..	6	..	
	Area notified in previous years.	62,615	..	..	(c) 6 (d) 62,602	7	..	
	Total ..	62,615	98	24	62,608	31	..	
	Reserved forests.							
Malabar, North.	Area notified in previous years.	167,361	262	..	..	167,361	(i) 261	
	Reserved lands not transferred to reserved forests during the year.							
	BEGUR.							
	Ladysmith additions III and IV.	..	..	623	..	623	..	No. 33, dated 4th January 1913.
	Area notified in previous years ..	22	..	..		22	..	
	Total ..	22	..	623	..	645	1	
	Reserved forests.							
Malabar, South.	Area notified in previous years ..	69,263	108	..	..	69,263	108	
	Reserved lands not transferred to reserved forests during the year.							
	Area notified in previous years..	35,223	55	..	..	35,223	55	
	Reserved forests.							
The Nilgiris.	Area notified in previous years..	306,122	478	..	(e) 3 (f) 237	305,882	478	No. 343, dated 29th July 1912.

(a) Less than one acre.
(b) Rectification of area due to adoption of Survey of India figures.
(c) Transferred to reserved forests.
(d) Transferred to unreserved lands.
(e) Disafforested.
(f) Wrongly included in the previous years' returns by the Collector.
(i) Fraction omitted to round off total.

Area of reserved forests and reserved lands during 1912-13—*cont.*

District.	Name of forest.	Area on 1st July 1912. Acres.	Area on 1st July 1912. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1913. Acres.	Area on 30th June 1913. Equivalent in square miles.	Number and date of notification of addition or transfer.
	WESTERN CIRCLE—*cont.*							
	Reserved lands not transferred to reserved forests during the year.							
The Nilgiris—*cont.*	COONOOR.							
	Keti valley block	..	..	49	..	49	..	No. 503, dated 11th November 1912.
	Area notified in previous years..	52,530	..	..	(*d*) 10 (*g*) 2,930	49,590	..	
	Total ..	52,530	82	49	2,940	49,639	77	
	Toda patta lands.							
		2,930	5	..	..	2,930	5	
	Reserved forests.							
Kollegal.	KOLLEGAL.							
	Doddasampagai addition (Andipalayam field No. 299).	..	..	2	..	2	..	No. 471, dated 28th October 1912.
	Area notified in previous years..	286,193	..	(*b*) 59	..	286,252	..	
	Total ..	286,193	447	61	.	286,254	447	
	Reserved lands not transferred to reserved forests during the year.							
	Addition to Doddasampagai extension, 1st bit.	..	..	6	..	6	..	No. 244, dated 15th May 1913.
	Chikkailur addition	..	..	66	..	66	..	No. 298, dated 4th June 1913.
	Chikkailur extension		..	58	..	58	..	No. 308, dated 20th June 1913.
	Area notified in previous years..	165,063	..	(*b*) 15,852	(*c*) 2	180,913	..	
	Total ..	165,063	258	15,982	2	181,043	283	
	Reserved forests.							
Coimbatore, North.	TALAMALAI.							
	Vellamundy addition (field No. 32 Kuduvay village).	..	..	3	..	3	..	No. 48, dated 10th January 1913.
	Area notified in previous years..	589,394	..	..	(*e*) 188	589,206	..	Nos. 112, and 114, dated 18th March 1913.
	Total ..	589,394	921	3	188	589,209	921	
	Reserved lands not transferred to reserved forests during the year.							
	Talamalai addition.. ..	..	..	226	..	226	..	No. 111, dated 14th March 1913.
	Palamalai addition	..	..	170	..	170	..	No. 115, dated 14th March 1913.
	Area notified in previous years.	278	..	98	(*c*) 3	373	..	No. 116, dated 14th March 1913.
	Total ..	278	..	494	3	769	1	
	Reserved forests.							
Coimbatore, Central.	METTUPALAYAM.							
	Modur Pethikuttai addition ..	.	..	19	..	19	..	No. 323, dated 1st July 1912.
	ERODE.							
	Survey No. 469-B of Vadamugam Vellodu tope reserve.	..	..	3	..	3	..	No. 233, dated 13th May 1912.
	ATTAPADI.							
	Attapadi block No. V .. Do. VI ..	.	..	28,940	..	28,940	..	No. 314, dated 22nd June 1912.
	Area notified in previous years.	196,360	..	(*b*) 537	(*e*) 35	196,862	..	Nos. 330 and 331, dated 22nd June 1913.
	Total ..	196,360	307	29,499	35	225,824	353	

(*b*) Rectification of area due to adoption of Survey of India figures.
(*d*) Transferred to unreserved lands.
(*g*) Transferred to "Toda patta lands" which have been shown separately.
(*c*) Transferred to reserved forests.
(*e*) Disafforested.

Area of reserved forests and reserved lands during 1912–13—*cont.*

District.	Name of forest.	Area on 1st July 1912. Acres.	Area on 1st July 1912. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 30th June 1913. Acres.	Area on 30th June 1913. Equivalent in square miles.	Number and date of notification of addition or transfer.
	WESTERN CIRCLE—*cont.*							
	Reserved lands not transferred to reserved forests during the year.							
Coimbatore, Central —*cont.*	MĒTTUPĀLAIYAM.							
	Survey Nos. 397 and 402 of Sujjalatti village in Modur reserve.	..	..	8	..	8	..	No. 109, dated 5th March 1913.
	Sundapatti addition I	..	..	8	..	8	..	No. 246, dated 14th May 1913,
	BOLAMPATTI.							
	Anaikatti block, North ..	..	..	1,124	..	1,124	..	No. 99, dated 15th February 1913.
	Do. South ..	..	..	4,713	..	4,713	.	
	Area notified in previous years.	30,585	..	..	(c) 28,962 (h) 1,390	233	..	
	Total ..	30,585	48	5,853	30,352	6,086	10	
	Reserved forests.							
Coimbatore, South.	Area notified in previous years.	290,628	454	..	.	290,628	454	
	Reserved lands not transferred to reserved forests during the year.							
	POLLACHI.							
	Anamalai reserve addition No. I	..	..	8	..	8	..	No. 472, dated 29th October 1912.
	Area notified in previous years.	16	..	..	..	16	..	
	Total ..	16	..	8	..	24	..	

(c) Transferred to reserved forests. (h) Excluded at settlement.

ANNUAL FORM No. 66.

Forest Department, Madras Presidency.

STATEMENT showing the Progress made in, and the Expenditure incurred on, Forest Settlements during 1912–13.

ANNUAL FORM

Forest Department,

STATEMENT showing the Progress made in, and the

Name of forest district.	Area already settled at commencement of year.	Areas finally settled during the year. Number and date of Government Order according final sanction to the settlement.	Name of forest settled.	Area in square miles.	Expenditure incurred during the year on areas finally settled. In forest accounts.	In other accounts.	Entire cost per square mile of areas finally settled during the year.
1	2	3	4	5	6	7	8
							Northern
	SQ. MLS.				RS. A. P.		
Ganjām ..	564	No. 1267, Revenue, dated 30th April 1913.	Budrungu	1·15	*	..	..
		No. 1371, Revenue, dated 10th May 1913.	Sallundi	1·28			
			Nagiri	1·78			
			Chamundi	0·88			
Vizagapatam.	302	No. 3480, Revenue, dated 18th November 1912.	Puligumala and Gomulabanda.	0·54	..	..	..
Gōdāvari, Upper.	428	....	....	..	..	..	..
Gōdāvari, Lower.	† 404	....	....	..	..	..	..
Kistna ..	278	....	....	..	..	..	..
Kurnool, East.	1,001	....	....	..	..	..	..
Kurnool, South.	778	No. 3772, Revenue, dated 17th December 1912.	North Veligonda addition II.	0·006	..	..	..
Kurnool, West.	858	....	....	..	..	..	..
Total ..	4,613			5·636	..	..	..
							(ral
Bellary ..	626	....	....	..	..	..	..
Anantapur..	743	G.O. No. 2755, Rev., dated 12th September 1912.	Agraharam additions	‡ 0·0003	..	..	..
		G.O. No. 2755, Rev., dated 12th September 1912.	Cherlopalli addition	‡ 0·0001	..	..	..
		G.O. No. 2932, Rev., dated 30th September 1912.	Vengalumma cheruvu extension.	0·09	..	..	..
Guntūr ..	814	....	....	..	..	..	..
North Cuddapah.	734	....	....	..	..	..	..
East Cuddapah.	1,083	....	....	..	..	..	..
Nellore ..	745	....	....	..	..	..	..
Chingleput.	209	....	....	..	..	..	..
Chittoor ..	840	G.O. No. 851, Rev., dated 20th March 1913.	Extension to Whitesides garden.	‡ 0·01	††14 5 2	..	..
		G.O. No. 693, Rev., dated 7th March 1913.	Chases hill addition	‡ 0·003	††96 0 0	..	..
		G.O. No. 2954, Rev., dated 2nd October 1912.	Chittoor addition (Gandlapalle.)	‡ 0·007	..	..	..
Total ..	5,794			0·1104	110 5 2	..	..

* Finally settled during the year but reservation will take effect from 1st July 1913.
† Difference due to adoption of India Survey figures.
‡ As per correct calculations now made.
§ Pending attestation of Forest Settlement Officer to corrections in section 16 Notification
‖ Notification under section 16 submitted.
¶ Under correspondence.
** Notification under section 4 for this block was cancelled after the close of the year.
†† Cost of acquisition.
(a) Sale are near Donabai.

No. 66.

Madras Presidency.

Expenditure incurred on, Forest Settlements during 1912–13.

Areas undergoing settlement.				Expenditure incurred during the year on areas undergoing settlement.		Estimate of areas in which settlement operations have not yet commenced.
At commencement of the year		Taken in hand during the year.				
Name of tract.	Area in square miles.	Name of tract.	Area in square miles.	In forest accounts.	In other accounts.	
9	10	11	12	13	14	15
Circle.				RS. A. P.		SQ. MLS.
Chokkapad	69·50	...	..	60 0 0	..	..
Sarugudu block VI	10·15	...	..	40 0 0	..	(a) 0·14
....	..	Pedamidisileru .. .. .. Pedakonda extension I .. Tulluvada extension V .. Enukuru extension II ..	96·48 1·23 0·50 0·50	..	..	443·52
Coringa extension	75	....	..	..	..	..
....	..	....	..	..	..	4·38
....	..	....	..	..	..	..
West Veligonda extension I ..	0·103	Owk extension II .. .. Jaladurgam addition I .. Do. do. II ..	0·01 0·01 0·02	..	..	..
....	..	Paniem addition	0·009	..	..	..
	154·753		98·759	100 0 0	..	448·04
Circle.						
Sandal area near Chilkanahatti. Enclosures to Adōni, East and West Reserves.	1 0·34	Enclosure to Neraniki Reserve.	0·04	..	..	....
Yerrakonda extension No. II.	9·80	....	..	739 0 6	..	.... §
Budikonda extension	0·58	....	..	..	..	.... ‖
Bhadrapur extension ..	0·56	....	..	..	..	.... ¶
..	..	....	..	..	..	....
..	..	....	..	..	..	....
....	..	....	..	..	..	....
....	..	Addition to Utukur Varini Block C.	0·01	..	..	....
Perungoli extension No. II.	0·02	Nandambakkam Extension II	0·01 ‡	..	..	....
....	..	Bommasamudram C addition.	0·025	..	..	....
....	..	....	..	..	..	....
....	..	....	..	..	..	....
	12·3		0·085	739 0 6	..	....

Statement showing the Progress made in, and the Expenditure

Name of forest district.	Area already settled at commencement of year.	Areas finally settled during the year.			Expenditure incurred during the year on areas finally settled		Entire cost per square mile of areas finally settled during the year
		Number and date of Government Order according final sanction to the settlement.	Name of forest settled.	Area in square miles.	In forest accounts.	In other accounts.	
1	2	3	4	5	6	7	8
							Southern
	SQ. MLS.						
Vellore, North.	499	....	....	..	..	..	..
Vellore, South.	745	....	....	..	..	..	..
Arcot, South.	345	....	....	..	..	..	..
Salem, North.	792	G.O. No. 729, Rev., dated 10th March 1913.	Bianurmalai extension ..	*0·32	..	..	..
		G.O. No. 899, Rev., dated 27th March 1913.	Sanamavu extension	0·001	..	..	..
Salem, South.	581	....	....	..	..	..	..
Trichinopoly.	356	....	....	..	..	..	..
Madura ..	666	G.O. No. 2334, Rev., dated 2nd August 1912.	Gundar valley extension ..	0·04493	..	..	..
		G.O. No. 2960, Rev., dated 3rd October 1912.	Mankaradu	0·00987	..	..	..
		G.O. No. 3181, Rev., dated 24th October 1912.	Survey No. 1704-B of Panakad in Perumalmalai reserve.	0·0023	..	..	..
		G.O. No. 3791, Rev., dated 19th December 1912.	Northern slopes	0·0710(*a*)	..	..	..
Tinnevelly *cum* Ramnad.	428	G.O. No. 3826, Rev., dated 23rd December 1912.	Survey No. 1861-B of Valaikulam and No. 2309 of Kollankondan.	0·0430	..	..	..
	..	G.O. No. 1642, Rev., dated 4th June 1912.	Valaikulam parambu extension	0·0540	..	..	..
	..	G.O. No. 1635, Rev., dated 4th June 1912.	Pudupatti	0·0770	..	..	..
	..	G.O. No. 1779, Rev., dated 17th June 1912.	Venkataswarapuram	0·0540	..	..	..
	..	G.O. No. 1641, Rev., dated 4th June 1912.	Sundrapandiam..	0·0540	..	..	..
	..	G.O. No. 836, Rev., dated 19th March 1913.	Lakshmipuram..	0·0560	..	..	..
	..	G.O. No. 3516, Rev., dated 21st November 1912.	Kottamalai reserve additions	0·190	..	..	..
	..	G.O. No. 2907, Rev., dated 21st September 1912.	Additions to Vadagaraipadagai.	0·110	..	..	..

* Correct area as per section 16 notification.
(*a*) Omitted to be shown under settlement in the previous return.

incurred on, Forest Settlements during 1912–13—*cont.*

Areas undergoing settlement.						Estimate of areas in which settlement operations have not yet commenced.
At commencement of the year.		Taken in hand during the year.		Expenditure incurred during the year on areas undergoing settlement.		
Name of tract.	Area in square miles.	Name of tract.	Area in square miles.	In forest accounts.	In other accounts.	
9	10	11	12	13	14	15
Circle.				RS.		SQ. MLS.
Survey No. 18, Vatrantangal village of Panamadangi reserve.	1·32	....	..	..	..	..
Survey Nos. 249, 250 and 251 of Kemparajapuram village, Tiruvallam plantation.	6·73	....	..	..	..	..
	8·05 acs. or ·01 sq. ml.		..	..	..	..
		Sholavaram reserve	0·0281	..	...	..
		Karapattu extension	0·0844	..	..	..
....	..	....	..	..	..	..
....	..	....	..	..	..	..
	..	....	..	..	..	..
Hudaiyadurgam	46	....	..	..	..	..
Arana	3	.	..	..	..	..
Tirthagiri	3	....	..	..	..	..
Vengur Padugais	1·00	....	..	..	..	20·70
Palamalai extension.. ..	1·39	..	..	..	..	..
V. Karapadi extension ..	1·00	....	..	..	..	..
....	..	Southern slopes	0·0137	..	..	..
....	..	Kokkuparai	0·0118	..	..	..
....	..	....	..	..	..	..
....	..	....	..	..	..	..
Vaaikulam additions	0·0090	....	..	..	..	..
Khansapuram	0·0600	....	..	..	..	..
Alagapuri	0·0004	....	..	..	..	..
Manalodai and Tirukuttachala, Parvatam estates.	0·114	....	..	..	..	..
....	..	....	..	..	..	..
Addition VI to Kottamadaki reserved forest.	0·031	....	..	..	..	..
Addition to reserved forest II (b) in Vikrama singapuram.	0·003	..	..	163	..	..
Last bit of Nadugani	0·002	....	..	..	..	..

Statement showing the Progress made in, and the Expenditure

Name of forest district.	Area already settled at commencement of year.	Areas finally settled during the year. Number and date of Government Order according final sanction to the settlement.	Name of forest settled.	Area in square miles.	Expenditure incurred during the year on areas finally settled: In forest accounts.	In other accounts.	Entire cost per square mile of areas finally settled during the year.
1	2	3	4	5	6	7	8
							Southern
	SQ. MLS.				RS.		
Tinnevelly *cum* Rāmnād—*cont.*	..	*G.O. No. 2959, Rev., dated 3rd October 1912	Additions to R. F. No. IV (*a*) in Tirumalapuram.	0·003	..	..	..
	..	* G.O. No. 2961, Rev., dated 3rd October 1912.	Naranapuram	0·011	..	..	..
	..	* G.O. No. 2811, Rev., dated 19th September 1912.	Vasudevanallur..	0·029	..	..	..
	..	* G.O. No. 2962, Rev., dated 3rd October 1912.	Melachintamani	0·010	..	..	..
	..	* G.O. No. 2812, Rev., dated 19th September 1912.	Melapuliangudi..	0·014	..	..	..
	..	G.O., No. 1083, Rev., dated 10th April 1913.	Addition II to Kottamadakki.	0·245	..	..	..
	..	G.O. No. 179, Rev., dated 17th January 1913.	Old Survey No. 1357-E of Ilanji.	0·049	..	..	..
	..	G.O. No. 3225, Rev., dated 29th October 1912.	Addition to Krishnapuram extension.	0·020	..	..	..
Total ..	4,412			1·4681	..	..	..
							Western
South Canara.	797 (*a*) + 1	G.O. No. 2167, Rev., dated 19th July 1912.	Kalnjimale addition	·009	..	..	..
		G.O. No. 3231, Rev., dated 29th October 1912.	Parappa addition II (S. No. 326·4 of Adur village).	(*b*)	19	..	..
Total ..	798			·009	19	..	..
Malabar, North.	262 (*e*)—1	....	....	..	..	..	..
Malabar, South.	108	....	....	..	..	..	..
The Nilgiris.	478	....	....	..	..	..	..
Kollegal ..	447	G.O. No. 3206, Rev., dated 28th October 1912.	Doddasampagai addition (Andipalayam field No. 299).	·004	..	..	..
Total ..	447			·004	..	..	..
Coimbatore, North.	921	G.O. No. 132, Rev., dated 10th January 1913.	Vellamundy addition (Field No. 32 Kuduvay village.)	·005	..	..	..
Total.	921			·005	..	..	..

* Reserved Forest V (*a*) in the previous year's return is an error for IV (*a*).

(*a*) Rectification of area due to adoption of Survey of India figures.
(*b*) Less than one acre.
(*c*) Added as per re-notification.
(*e*) Fraction omitted to round off total.

incurred on, Forest Settlements during 1912–13—*cont.*

Areas undergoing settlement.						Estimate of areas in which settlement operations have not yet commenced.
At commencement of the year.		Taken in hand during the year.		Expenditure incurred during the year on areas undergoing settlement.		
Name of tract.	Area in square miles.	Name of tract.	Area in square miles.	In forest accounts.	In other accounts.	
9	10	11	12	13	14	15
Circle—cont.						
				RS.		SQ. MLS.
....	..	....	..	..	..	..
....	..	....	..	..	..	..
..	..	....	..	..	..	..
....	..	....	..	..	..	..
....	..	....	..	..	..	..
....	..	....	..	..	..	..
....	..	....	..	..	..	..
....	..	....	..	..	..	..
	55·6194		0·1380	163	..	20·70
Circle.						
Baindur extension I ..	·003	....	..	243	..	..
Do. II ..	·008	....	..	469	..	..
....	..	Aletti addition I	·006	..	..	..
....	..	Do. II	·02	..	..	..
....	..	Do. III	·009	..	..	..
	·011		·035	712	..	..
....	..	Ladysmith additions III and IV.	97	..	..	..
The Silent valley	35	....	..	743	..	..
....	..	Keti valley block	·08	..	..	..
Madeswaranmalai and its extension.	246 (*a*)+26	Addition to Doddasampagai extension, first bit.	·009	..	..	2
Mambetta	12 (*a*)—1	Chikkailur addition	·103	..	..	..
	..	Chikkailur extension	·091	..	..	..
	283		·203	..	..	2
Gutialattur extension ..	·387 (*c*)+·153	Talamalai addition	·353	664	..	..
....	..	Palamalai addition	·266	..	..	..
South Bargur additions ..	·042	....	..			
	·582		·619	664	..	..

Statement showing the Progress made in, and the Expenditure

Name of forest district.	Area already settled at commencement of year.	Areas finally settled during the year.					
		Number and date of Government Order according final sanction to the settlement.	Name of forest settled.	Area in square miles.	Expenditure incurred during the year on areas finally settled.		Entire cost per square mile of areas finally settled during the year.
					In forest accounts.	In other accounts.	
1	2	3	4	5	6	7	8
Western							
	SQ. MLS.				RS.		
Coimbatore, Central.	307 (a) + 1	G.O. No. 1864, Rev., dated 22nd June 1912.	Attapadi block V. Do. VI.	47·39 (d)—2·18	..	..	..
		G.O. No. 1438, Rev., dated 13th May 1912.	Survey No. 469 B of Vadamugum Vellodu tope reserve.	·006	..	..	..
		G.O. No. 1943, Rev., dated 1st July 1912.	Modur Pethikutai addition ..	·03	..	..	..
Total ..	308			45·246	..	..	.
Coimbatore, South.	454	....	....	..	..	..	..
Grand total.	3,775			45·26	19	..	..

(a) Rectification of area due to adoption of Survey of India figures.
(d) Excluded at Settlement.

incurred on, Forest Settlements during 1912–13—*cont.*

Areas undergoing settlement.						Estimate of areas in which settlement operations have not yet commenced.
At commencement of the year.		Taken in hand during the year.		Expenditure incurred during the year on areas undergoing settlement.		
Name of tract.	Area in square miles.	Name of tract.	Area in square miles.	In forest accounts.	In other accounts.	
9	10	11	12	13	14	15
Circle—cont.						
				RS.		SQ. MLS.
Jagir Porathi	36	Survey Nos. 397 and 402 of Sujjalatti village in Moduru reserve.	·01	..	..	..
....	..	Sundapatti addition I	·01	..	..	..
....	..	Anaikatti block, North ..	1·76	..	..	..
....	..	Do. South ..	7·36	..	..	..
	·36		9·14	..	..	..
Thalavoipatnam addition ..	·025	Anamalai reserve addition No. 1.	·01	460	..	..
	318·9		11	2,579	..	2

Annual Form No. 67.

Forest Department, Madras Presidency.

Record of Demarcation and Maintenance of Boundaries during 1912–13.

District.	Length of boundaries artificially demarcated during the year.	Length of previously existing boundaries repaired.	Length of previously existing boundaries not repaired.	Total length of artificially marked boundaries at the close of the year.	Length of boundaries still to be demarcated at close of year.	Length of natural boundaries not requiring artificial marks.	Total length of boundaries at the close of the year.	Expenditure on demarcation during the year. On new work.	Expenditure on demarcation during the year. On repairs.
1	2	3	4	5	6	7	8	9	10
Northern Circle.	MILES.	MILES.	MILES.	MILES.	MILES.	MILES.	MILES.	RS.	RS.
Ganjām	(s) 29	(t) & (f) 1,045 4	(u) 150	(v) 1,228	(w) 131	(x) 80	(y) 1,439	(z) 444	(aa) 157 (g) --37
Vizagapatam.. ..	22	(f) 518	..	540	..	..	540	653	..
Gōdāvari, Upper ..	..	(f) 425	..	425	..	143	568	(a) 8,699	96 (h)—81
Do. Lower ..	..	(f) 638 58	105	(b) 793	..	(b) 52	(b) 845	..	8
Kistna	(c) 6	(f) 525	86	617	..	41	658	(d) 387	337
Kurnool, East ..	..	(f) 625 13	66	703	..	48	751	64	563
Do. South ..	..	(f) 378 4	247	629	..	5	634	..	484
Do. West ..	2	(f) 512 184	220	(e) 918	..	101	1,019	151	18 (h) -2
Total ..	59	(f) 4,657 263	874	5,853	131	470	6,454	10,398	1,543
Central Circle.									
Bellary	..	25	1,763	1,788	..	..	1,788	..	(i) 451 (h)—21
Anantapur	8	79	1,738	1,825	..	..	1,825	99	(j) 2,095 (k) 307
Guntūr	..	9	1,383	1 392	..	..	1,392	..	(l) 551
Cuddapah, North ..	..	(m) 26 (f) 614	738	1,378	..	29	1,407	..	(o) 973
Do. East ..	3	46 (f) 355	510	914	..	46	960	(p) 19	(q) 184 (h)+268
Nellore	..	(f) 2,079	..	2,079	..	84	2,163	..	(r) 267 (h)+785

(a) Includes Rs. 8,544 spent on Dupati survey for which the number of miles demarcated have not been furnished by the Collector.

(b) Difference between these and last year's figures is due to wrong inclusion of the boundaries of Coringa extension reserved land in previous years.

(c) Last year's figure 5 in column 6 is incorrect.

(d) Demarcation of boundary between Gudumetla and Ustipalli and the Gudimetla reserve.

(e) Last year's figure in column 5 is wrong due to inclusion of 9 miles of internal lines.

(f) Cleared by forest subordinates free of cost.

(g) Relates to 1911-12 but adjusted by Accountant-General in 1912–13.

(h) Added or deducted as per Accountant-General's audited figure.

(i) Includes cost of cutting coupe lines demarcation planting stone slabs and whitewashing, etc., relating to coupes and of notice boards as per B.P. F. No. 1175, Mis., dated 5th August 1912.

(j) For clearing boundary lines and erecting cairns.

(k) Rs. 307 for fixing stone slabs.

(l) Represents cost of survey stones, clearing boundary lines, cutting coupe lines and of sign boards to distinguish areas closed and of construction and repair of cairns.

(m) Distance cleared.

(o) Rs. 389 on purchase of grazing sign-board, etc.
,, 286 on clearing the common boundary line between Badvel and Proddatur taluks.
,, 229 on other repairs.
,, 69 cutting coupe lines.
973

(p) On clearing lines.

(q) On repairs.

(r) Represents cutting kancha lines

	RS.
Represents cutting kancha lines	54
,, goat lines.	11
Rectification of boundary lines ..	115
Planting slabs around reserves ..	87
	267

(s) Excludes 109 miles of boundaries belonging to the Parlākimedi maliahs.
(t) Do. 229 do. do.
(u) Do. 4 do. do.
(v) Do. 342 do. do.
(w) Do. 25 do. do.
(x) Do. 6 do. do.
(y) Do. 373 do. do.
(z) Excludes Rs. 1,179 spent in the Parlākimedi maliahs.
(aa) Do. Rs. 43 do. do.

Record of Demarcation and Maintenance of Boundaries during 1912–13—*cont.*

District.	Length of boundaries artificially demarcated during the year.	Length of previously existing boundaries re-paired.	Length of previously existing boundaries not repaired.	Total length of artificially marked boundaries at the close of the year.	Length of boundaries still to be demarcated at the close of the year.	Length of natural boundaries not requiring artificial marks.	Total length of boundaries at the close of the year.	Expenditure on demarcation during the year. On new work.	On repairs.
1	2	3	4	5	6	7	8	9	10
Central Circle—cont.	MILES.	MILES.	MILES.	MILES.	MILES.	MILES.	MILES.	RS.	RS.
Chingleput	..	(a) (b) 904	..	904	..	..	904	..	(c) 1,169 (e) + 6
Chittoor	5	(d) (b)1,472	..	1,477	..	51	1,528	3	443 (e) + 447
Total ..	16	185 (b) 5,424	6,132	11,757	..	210	11,967	121	7,718
Southern Circle.									
North Vellore ..	..	1,149	..	1,149	..	7	1,156	..	96 (e)—72
South ,, ..	..	(b) 808 27	258	1,093	..	22	1,115	..	17 (e) + 1
South Arcot	..	1,220	..	1,220	..	..	1,220	..	(f) 197 (e)—27
North Salem	..	1,280	42	1,322	7	40	1,369	(g) 50	(e)—170
South ,, ..	..	(b) 636 342	165	1,143	..	5	1,148	(h) 90	377
Trichinopoly	..	940	67	1,007	11	24	1,042	(i) 65	378
Madura ..	110	(b) 788 64	272	1,234	320	178	1,732	4,653	782
Tinnevelly	1	217	256	474	..	14	488	20	(e)—2
Total ..	111	5,239 (b)2,232	1,060	8,642	338	290	9,270	4,878	1,577
Western Circle.									
South Canara ..	7	45 (b) 6	3,654	3,712	46	124	3,882	188	595
Malabar, North ..	17	169	948	1,134	54	36	1,224	492	(k) 167
Do. South ..	..	70	36	106	5	55	166	..	350
The Nilgiris . ..	..	4 (b) 122	1,488	1,614	(l)	299	1,913	(p) 212	5 (k) 111
Kollegal (j)	65	12	..	77	46 (b)282	87	492	2,046	(b) 232
Coimbatore, North ..	..	57 (b) 407	65	529	42	110	681	..	2,168
Do. Central.	..	32 (b) 258	284	574	(m) 19	44	637	(n) 42	326 (k) 34 (o) 42
Do. South ..	..	5 (b) 127	82	214	..	52	266	..	105 (k) 22
Total ..	89	394 (b) 920	6,557	7,960	212 (b)282	807	9,261	2,980	4,157
Grand Total ..	275	6,081 (b)13,233	14,623	34,212	963	1,777	36,952	18,377	14,995

(a) Difference : between the total of columns 3 and 4 of the current year and column 5 of last year is due to the transfer of 20 miles of boundary of Ugumudy Reserved Forest to the Nellore district.
(b) Cleared by Forest Subordinates free of cost.
(c) For cutting 30 chains of boundary line and erecting cairns . Rs. 4
Cost of tar for marking trees wrongly debited to A VIII (b) ,, 2
Cutting 47 miles 30 chains of coupe and strip lines. .. .. ,, 227
Pay and famine batta of watchers .. .. ,, 936

1,169

(d) Difference : between columns 3 and 4 of this year's return and column 5 of last year's is explained by the Collector to be due to correct figures obtained for Chandragiri, Tirupati and Palmaner ranges.
(e) Added or deducted as per Accountant-General's figures.
(f) Represents expenditure on rectification of demarcation of certain reserves and renewal of slabs.
(g) Cost of demarcation of proposed Hudaidurgam reserve.
(h) Cost of demarcation of the proposed Jarugumalai, Arana and Tirthagiri blocks.
(i) Cost of demarcation of the proposed Sukkalampatti kombai reserve.
(j) Revised figures furnished by the Collector.
(k) Cost of cutting and clearing block, compartment and coupe lines
(l) Less than one mile.
(m) The figure given last year is reported by the Collector to be incorrect.
(n) Cost of preliminary demarcation.
(o) Cost of minor works wrongly debited to A-VIII (a).
(p) Cost of preparing stories.

Annual Form No. 68.

Forest Department, Madras Presidency.

Statement of Forest areas surveyed and under survey during the year 1912–13.

District.	Areas surveyed and under survey during the year 1912–13.															
	Special surveys—Maps on 4-inch scale or over by Survey of India Department or Madras Survey.								Ordinary, included in district surveys.							
	With interior details.					Boundary surveys.			With interior details.					Boundary surveys.		
	With details of growing stock.		Without details of growing stock.						With details of growing stock.		Without details of growing stock.					
	Previous.	Of year.	Previous.	Of year.	Total cost	Previous.	Of year.	Total cost.	Previous.	Of year.	Previous.	Of year.	Total cost.	Previous.	Of year.	Total cost.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Northern Circle.	S. M.	S. M.	S. M.	S. M.	RS.	S. M.	S. M.	RS.	S. M.	S. M.	S. M.	S. M.	RS.	S. M.	S. M.	RS.
Direction	..	..			..	..	..	..	..	..	..	..	..	..	..	..
Ganjām	..	..	(a) 584	..	..	447	..	(b)11,081	..	..	..	..	..	..	..	..
Vizagapatam	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gōdāvari, Upper ..	..	..	(a) 436	} ..	..	252	..	..	..	..	..	..	..	..	..	..
Do. Lower ..	..	..	(a) 70													
Kistna..	..	..	(d) 88	..	..	27	..	..	..	..	..	..	..	..	..	..
Kurnool, East .	..	..	} (d) 2,725	..	..	937	..	..	..	..	..	..	..	..	..	..
Do. South ..	..	..														
Do. West ..	..	..														
Total ..	..	..	3 ,903	..	..	1,663	..	11,081	..	..	..	..	..	..	..	..
Central Circle.																
Bellary	..	..	..	..	..	..	..	..	..	..	(g) 690	..	..	..	..	..
Anantapur	..	..	241	..	..	..	..	..	..	..	323	..	..	..	..	..
Guntūr	..	..	(n) 65	..	..	..	..	..	..	..	..	..	..	..	..	..
North Cuddapah ..	..	..	(k) 587	..	..	..	..	..	..	..	..	..	..	..	..	..
East do. ..	..	..	(l) 1,048	..	..	..	..	..	..	..	..	..	..	..	..	..
Nellore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chingleput	..	..	40	..	..	..	..	..	..	..	..	..	..	..	..	..
Chittoor	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..
Total ..	..	..	1,981	..	..	..	..	..	..	.	1,013	..	..	..	..	..
Southern Circle.																
North Vellore ..	..	..	499	..	..	..	..	..	..	..	..	..	..	..	..	..
South do. ..	..	..	745	..	..		..	..	..	..	..	..	..	..	..	..
South Arcot	..	..	68	..	2,767	145 linear miles.)	..	..	..	..	272	..	..	..	..	..
North Salem	..	..	792	..	24,366	..	..	..	..	..	..	..	..	..	..	..
South do.	..	..	541	..	..	..	..	..	..	..	..	..	..	40	..	..
Trichinopoly.. ..	..	..	66	..	25,000	124	..	246	..	..	..	..	..	280	..	..
Madura	..	..	618	..	..	..	..	..	..	..	..	..	..	..	..	..
Tinnevelly *cum* Rāmnād.	..	..	(p) 427 + 2	..	3,451	..	..	..	..	..	..	..	..	..	..	..
Total ..	..	..	3,758	..	55,584	269	..	246	..	..	272	..	..	320	..	..

(a) Rectification (includes area of enclosures also).
(b) Relates to Ganjām, Gōdāvari (Upper and Lower), Kistna and Kurnool (East, South and West).
(d) Correspondence pending with Survey of India Party regarding the accuracy of these figures.
(g) Includes reserved lands and leased forests.
(k) Last year's figures found to be incorrect when computed.
(l) Revised figures furnished by the Collector.
(n) Transferred from column 2 of the previous year's return.
(p) Represents the area of enclosures already surveyed and since added to Reserved forests.

Statement of Forest areas surveyed and under survey during the year 1912–13—*cont.*

District.	Areas surveyed and under survey during the year 1912–13—*cont.* Chain and compass or other surveys by local officers. With interior details. 4-inch or over. Previous.	Of year.	Under 4-inch. Previous.	Of year.	Total cost.	Boundary surveys. Previous.	Of year.	Total cost.	Areas remaining to be taken under survey.	Total forest area at end of year, as per Form No. 65.	Cost. Previous.	Of year.	Entire cost of all surveys to end of the year.
	18	19	20	21	22	23	24	25	26	27	28	29	30
Northern Circle.	S. M.	S. M.	S. M.	S. M.	RS.	S. M.	S. M.	RS.	S. M.	S. M.	RS.	RS.	RS.
Direction	..	..	..	..	..	..	..	..	..	..	2,291	..	2,291
Ganjām	53	..	..	..	..	(u)1,630	(v)100	72	(x)..	(y) 639	(z) 21,150	(aa) (c) 1,304	(bb) 22,454
Vizagapatam	302	..	..	..	..	..	..	..	11	313	2,207	.. (f) + 93	2,300
Gōdāvari Upper ..	..	..	..	16	31	95 villages	89 villages.	(e) ..	..	527	7,694	2,929 (f) − 156	10,467
Gōdāvari Lower ..	1	..	26	..	6	540	..	796	376	479	12,458	(c) 638	13,096
Kistna	16	..	..	..	5	374	..	203	178	282	6,458	(c) 840	7,298
Kurnool, East	51	..	..	..	215	92	..	..	..	1,001	14,948	1,398	19,926
Do. South						143	..	..	143	778		2,509	
Do. West						5	..	203	280	858		(c) 1,071	
Total ..	423	..	26	16	257	2,784 and 95 villages.	100 and 89 villages.	1,274	988	4,877	67,206	10,689 (f) − 63	77,832
Central Circle.													
Bellary	15	19	..	..	661	..	..	..	..	690	6,988	1,468	8,456
Anantapur	179		..	..	..	67	..	1,775	11	754	5,397	1,452	6,849
Guntūr	29 (h) 25	47 (h) 9	.. ..	.. ..	294 ..	.. ..	.. ..	.. ..	507	814	16,699	1,054	17,753
North Cuddapah	..	..	..	..	..	..	..	..	(k) 147	734	1,11,750	633	..
East do.	..	..	..	..	..	ACS. (m) 38	..	..	(l) 35	1,083		753	1,13,186
Nellore	..	..	..	..	..	S. M. (i) 1	..	..	(j) 260	745	5,639	1,263	6,902
Chingleput	..	..	..	..	..	..	..	..	..	209	3,874	* 388	4,262
Chittoor	..	..	..	..	..	..	..	..	..	840	508	† 480	988
Total ..	248	75	..	..	955	68 38 acres.	..	1,775	960	5,869	1,50,855 (o)+2,582	7,491 (o)+ 983	1,58,346 (o)+3,565
Southern Circle.													
North Vellore	..	..	..	..	..	..	..	..	..	499	8,079	..	8,079
South do.	..	..	..	..	..	..	..	..	..	745	12,468	(q) 584	13,052
South Arcot	6	..	..	..	52	..	..	..	..	345	6,783	(q) 468	7,251
North Salem	..	..	..	..	..	..	..	..	..	838	31,148	(q) 1,740	32,888
South do.	38	..	..	..	317	398	..	149	6	587	28,368	(q) 1,184	29,552
Trichinopoly	27	(r) 1	..	..	1,264	149	..	524	109	359	35,578	(q) 580	36,158
Madura	..	..	..	..	..	48	..	..	..	666	6,697	(q) 1,220 (f) − 95	7,822
Tinnevelly *cum* Rāmnād ..	..	..	..	..	..	..	..	..	..	429	3,723	(q) 247 (f) + 19	3,989
Total ..	71	1	..	..	1,633	595	..	673	115	4,468	1,32,844 (o) +203	5,947 (o) +580	1,38,791 (o) +783

* Pay of a draftsman. † Pay of draftsman and cost of preparation of maps at the Madras Survey office.

(c) Includes establishment charges.
(e) Excludes Rs. 8,544 reported by the Collector to have been spent during the year and Rs. 9,937 in the previous years (= Rs. 18,481).
(f) Added or deducted as per Accountant-General's audited figures.
(h) Length in linear miles of spring channels surveyed.
(i) Omitted to be shown in the District return.
(j) Hill blocks to be surveyed by Survey of India to whom a list of reserves has been furnished.
(k) Last year's figure reported to be incorrect.
(l) Revised figure furnished by Collector.
(m) Area of Kodur red sanders plantation surveyed in the previous year but omitted to be shown last year in the District return.
(o) Expenditure under Direction.
(q) Pay of Surveyors and Draftsmen.
(r) Free of cost.
(t) Expenditure under Direction.
(u) Excludes 10·62 miles belonging to Parlākimedi maliahs.
(v) Do. 21·56 do. do.
(x) Do. 43·70 square miles belonging to Parlākimedi maliahs.
(y) Do. 75 do. do.
(z) Excludes Rs. 303 incurred in the Parlākimedi maliahs.
(aa) Do. 519 do. do.
(bb) Do. 822 do do.

Statement of Forest areas surveyed and under survey during the year 1912–13—*cont.*

District.	Areas surveyed and under survey during the year 1912–13.															
	Special surveys—Maps on 2-inch scale or over, by Survey of India or Madras Survey.								Ordinary, included in topographical programme of India or in district surveys.							
	With interior details.					Boundary surveys.			With interior details.					Boundary surveys.		
	With details of growing stock.		Without details of growing stock.						With details of growing stock.		Without details of growing stock.					
	Previous.	Of year.	Previous.	Of year.	Total cost.	Previous.	Of year.	Total cost.	Previous.	Of year.	Previous.	Of year.	Total cost.	Previous.	Of year.	Total cost.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Reserved forests and reserved lands.																
	S. M.		S. M.	S. M.		S. M.		RS.			S. M.		RS.			
Western Circle.																
South Canara ..	..	..	719	..	..	592 and 25 linear miles.	..	7,390	..	..	77	..	‡ 6,594	..	..	..
Malabar, North ..	..	..	155	..	..	158 and 3 linear miles.	..	7,390	..	..	..	..	..	..	..	..
Do. South ..	1	..	108 (*a*) 55	..	..	130	..	..	..	..	2	..	..	..	..	..
The Nilgiris	..	..	502	..	..	..	..	..	..	..	..	..	..	..	..	..
Kollegal	..	..	446 (*a*) 246 †+ 26	1 (*a*) 11	..	319	..	7,574	..	..	..	..	..	..	..	..
Coimbatore, North ..	..	..	895	..	..				..	..	* 26	..	..	..	..	..
Do. Central ..	..	..	339 (*e*)—2	..	..	7	..	..	..	..	* 16	..	..	..	..	..
Do. South ..	..	..	§ 447	..	..				..	..	* 7					
Total ..	1	..	3,609 (*a*) 327	1 (*a*) 11	..	1,206 and 28 linear miles.	..	22,354	..	..	128	..	6,594	..	..	..
Grand total, Presidency.	1	..	13,578	12	55,584	3,138 28 linear miles.	..	22,354	..	..	1,413	..	6,594	320	..	..

(*a*) Reserved lands. (*e*) Excluded at settlement.
* Area for which final maps have been prepared by the Madras Survey.
† Rectification of area due to adoption of Survey of India figures.
‡ Includes the cost of survey of 73 square miles in Coorg forests.
§ One hundred and thirty square miles resurveyed on 2-inch scale during 1909–10 and 9 square miles during 1911–12.

Statement of Forest areas surveyed and under survey during the year 1912-13—*cont.*

District.	Areas surveyed and under survey during the year 1912-13—*cont.* Chain and compass or other surveys by local officers. With interior details. 4-inch or over. Previous.	With interior details. 4-inch or over. Of year.	With interior details. Under 4-inch. Previous.	With interior details. Under 4-inch. Of year.	With interior details. Total cost.	Boundary surveys. Previous.	Boundary surveys. Of year.	Boundary surveys. Total cost.	Areas remaining to be taken under survey.	Total forest area at end of year, as per Form No. 65.	Cost. Previous.	Cost. Of year.	Cost. Entire cost of all surveys to end of the year.
	18	19	20	21	22	23	24	25	26	27	28	29	30
Reserved forests and reserved lands—cont.													
Western Circle.		S. M.				S. M.	S. M.		S. M.	S. M.	RS.	RS.	RS.
South Canara ..	..	..	..	..	..	906	2	..	..	798	58,740	381	59,121
Malabar, North ..	..	..	..	..	..	6	..	..	106	261 (*a*) 1	14,301	694	14,995
Do. South ..	..	..	..	..	..	183	..	..	..	108 (*a*) 55	2,895	365	3,260
The Nilgiris ..	..	..	..	..	..	..	..	..	(*b*) 58	478 (*a*) 82	3,897	448	4,345
Kollegal	..	..	..	..	..	3 linear miles.	65 linear miles.	..	..	447 (*a*)283	98,924	1,284	1,00,685
Coimbatore, North ..	..	..	..	..	..	1	1	..	..	921 (*a*) 1		477	
Do. Central ..	..	..	..	..	..	..	4	..	..	353 (*a*)10	13,790	615	15,458
Do. South ..	..	11	..	..	..	2	..	..	..	454		1,053	
Total ..	..	11	..	..	..	1,098 and 3 linear miles.	7 and 65 linear miles.	..	164	3,820 (*a*) 432	1,92,547 (*c*) + 69 (*d*) + 12,476	5,317	1 97,864 (*c*) 69 (*d*)+12,476
Grand Total ..	742	87	26	16	2,845	4,545 95 villages 3 linear miles.	107 89 villages 65 linear miles	3,722	2,227	19,466	5,58,782	30,944	5,89,726

(*a*) Reserved lands.
(*b*) Reserves of less than one square mile in extent.
(*c*) Charges included under Direction in 1906-07.
(*d*) Survey of India charges in 1906-07.
(*e*) Excluded at settlement.

Annual Form No. 69.

Forest Department, Madras Presidency.

Progress made in working-plans during 1912–13.

District.	Areas for which working-plans have been completed and approved by the Board.		Areas for which working-plans are being compiled or have been compiled but not sanctioned.		Areas for which working-plans have still to be taken in hand.	Areas for which working-plans are not at present required.	Total forest area as in Form No. 65.	Entire cost per square mile of working-plans completed.	Remarks
	At commencement of the year.	During the year.	At commencement of the year.	Taken in hand during the year.					
1	2	3	4	5	6	7	8	9	10
Northern Circle.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	RS.	
Ganjām	442	..	..	..	58	139	639	..	
Vizagapatam ..	145	..	28	..	15	125	313	..	
Gōdāvari, Upper ..	..	..	225	..	302	..	527	..	
Do. Lower ..	(a) 24	..	55	..	325	75	(b) 479	..	
Kistna	58	92	65	..	67	..	282	..	
Kurnool, East ..	..	..	..	..	136	865	1,001	..	
Do. South ..	115	..	(c) 395	..	112	156	778	1	
Do. West ..	(c) 438	31	..	..	..	389	858	..	
Total ..	1,222	123	768	..	1,015	1,749	4,877	1	
Central Circle.									
Bellary	259	..	105	..	326	..	690	..	
Anantapur ..	* 426	..	..	..	328	..	754	..	
Guntūr	41	..	164		609	..	814	..	
North Cuddapah ..	158	..	272	..	177	127	734	..	
East Cuddapah ..	337	..	..	..	746	..	1,083	..	
Nellore	(d) 118	3	..	84	540	..	745	..	
Chingleput ..	209	..	..	..	..	..	209	.	
Chittoor	527	264	..	..	49	..	840	..	
Total ..	2,075	267	541	84	2,775	127	5,869	..	
Southern Circle.									
North Vellore ..	497	..	..	..	2	..	499	..	
South do.	685 (e)—52	..	60	..	(e) 52	..	745	..	
South Arcot ..	155	..	162	..	19	9	345	..	
North Salem ..	161	..	677	..	..	..	838	..	
South do. .	453	..	..		134	..	587	..	
Trichinopoly *cum* Tanjore.	205	..	39	..	112	3	359	..	
Madura	356	..	..	..	310	..	666	..	
Tinnevelly *cum* Ramnad.	246	..	..	..	..	183	429	..	
Total ..	2,758 (e)—52	..	938	..	629	195	4,468	..	

* Difference due to disafforestation of Ramagiri reserve which was under working-plan.

† Includes 40½ sq. miles of Palakondas timber working-plan submitted to Board, but subsequently withdrawn on account of change of system suggested by the Conservator.

(a) Working-plans for Mallavaram and Devancheruvu reserves and Peddāpur range were cancelled in Board's Proceedings Forest Mis. No. 243, dated 20th February 1913, and Mis. No. 727, dated 25th November 1912.

(b) Rectification of area due to adoption of Survey of India figures.

(c) Collector reports that last year's figures are wrong.

(d) The two square miles of Sriharikota casuarina plantations shown in column 3 of last year's report is omitted as this area has been already included in the main Sriharikota sanctioned working-plan.

(e) Fifty-two square miles have been transferred to column 6, as the Tiruppattur Range sandalwood working-plan which ended in 1910–11 requires revision.

Progress made in working-plans during 1912–13—*cont.*

District.	Areas for which working-plans have been completed and approved by the Board.		Areas for which working-plans are being compiled or have been compiled but not sanctioned.		Areas for which working-plans have still to be taken in hand.	Areas for which working-plans are not at present required.	Total forest area, as in form No. 65.	Entire cost per square mile of working-plans completed.
	At commencement of year.	During year.	At commencement of year.	Taken in hand during year.				
1	2	3	4	5	6	7	8	9
				Reserved forests.				
Western Circle.	SQ. MLS.		SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	RS.
South Canara	589	..	2	..	207	*	798	..
Malabar, North	178	..	7	..	76	..	261	..
Do. South	7	..	..	..	95	2	104	..
The Nilgiris	103	..	6	..	369	..	478	86
Kollegal	43	..	20	2	80	302	447	..
Coimbatore, North ..	289	..	..	..	632	..	921	..
Do. Central ..	220	..	..	..	54	79	353	..
Do. South ..	75	..	..	..	35	317	427	..
Total ..	1,504	..	35	2	1,548	700	3,789	..
				Reserved lands.				
South Canara	..	..	..	..	*	..	*	..
Malabar, North	..	..	..	..	1	..	1	..
Do. South	..	..	..	..	..	35	35	..
The Nilgiris	..	..	..	..	6	..	6	..
Kollegal	10	..	..	..	80	193	283	..
Coimbatore, North ..	..	..	..	..	1	..	1	..
Do. Central ..	..	..	..	..	10	..	10	..
Do. South ..	..	..	..	..	..	*	*	..
Total ..	10	..	..	..	98	228	336	..
				Leased forests.				
Malabar, South	24	..	..	..	..	..	24	..
The Nilgiris	76	..	..	..	..	..	76	..
Coimbatore, South ..	..	..	..	..	27	..	27	..
Total ..	100	..	..	..	27	..	127	..
Total, Western Circle..	1,614	..	35	2	1,673	928	4,252	..
Grand Total, Presidency.	7,617	390	2,282	86	6,092	2,999	19,466	..

* Less than one square mile.

ANNUAL

Forest Department,

COMMUNICATIONS

District.	New work undertaken during the year.					
	Buildings.		Roads and paths.			Total expenditure on new works.
	Description of building.	Expenditure incurred.	Road or path and object of the same.	Length of road or path.	Expenditure incurred.	
1	2	3	4	5	6	7
						Northern
		RS.		MLS.	RS.	RS.
Direction ..	....	..	....	..	..	..
	Total, Direction ..	..		..	..	..
Ganjam ..	Rest-houses	1,187	Cart-roads	$10\frac{3}{8}$	4,848	10,103
	(a) Houses for subordinate establishment	3,168	Bridle paths	5	36	..
			Bridge	..	252	..
	Others	612		$15\frac{3}{8}$	5,136	10,103
			Add A-VII (c)	..	..	358
	Total, Ganjam ..	4,967		$15\frac{3}{8}$	5,136	10,461
Vizagapatam.	Rest-houses	1,266	Cart-roads	$\frac{5}{8}$	220	3,347
	Houses for subordinate establishment	175				
	Others	1,686				
	Total, Vizagapatam ..	3,127		$\frac{5}{8}$	220	3,347
Gōdāvari, Upper.	Rest-houses	..	Cart-roads	106	3,988	4,207
	Houses for subordinate establishment	..	Add as per Accountant-General's audited figure ..	..	+ 219	..
	Others	..		..	4,207	..
			A-VII (c)	..	..	116
	Total, Gōdāvari, Upper ..	..		106	4,207	4,323
Gōdāvari, Lower.	Rest-houses	627	Cart-roads	$4\frac{5}{8}$	1,846	3,534
	Houses for subordinate establishment	332				
	Others	729	Add VII (c)	..	..	126
	Total, Gōdāvari, Lower ..	1,688		$4\frac{5}{8}$	1,846	3,660

(a) Excludes Rs. 105 on account of a forester's shed incurred in the Parlākimedi maliahs.

FORM No. 70.

Madras Presidency.

and Buildings.

Repairs executed during the year.					
Buildings.		Roads and paths.			Total expended on repairs.
Nature of repairs.	Expenditure incurred.	Nature of repairs.	Length repaired.	Expenditure incurred.	
8	9	10	11	12	13
Circle.					
	RS.		MLS.	RS.	RS.
Others	1,604	Cart-roads	$\frac{1}{16}$	55	1,659
	1,604		$\frac{1}{16}$	55	1,659
Rest-houses	2,127	Cart-roads	$18\frac{1}{8}$	371	5,689
(b) Houses for subordinate establishment	399	Ghat-roads	$1\frac{7}{8}$	32	..
			20	403	..
Others	193	Add as per Accountant-General's audited figure	..	+ 33	..
		Add pay of establishment	..	434	..
	2,719				
Add pay of establishment	2,111		20	870	5,689
		Add A-VII (c)	..	..	24
	4,830	Add as per Accountant-General's audited figure	..	..	+ 11
Deduct as per Accountant-General's audited figure	— 11				
	4,819		20	(a) 870	5,724
Rest-houses	499	Cart-roads	17	340	1,927
Houses for subordinate establishment	207	Add as per Accountant-General's audited figure	..	+ 1	..
Others	36		17	341	1,927
	742				
Add pay of establishment	844	Add A-VII (c) as per Accountant-General's audited figure	..	..	+ 105
	1,586		17	341	2,032
Rest-houses	88	Cart-roads	..	..	2,368
Houses for subordinate establishment	14	Add A-VII (c)	..	..	13
Others	395	Add as per Accountant-General's audited figure	..	..	+ 40
	497				
Add pay of establishment	1,861				
Add as per Accountant-General's audited figure	+ 10				
	2,368		..	..	2,421
Rest-houses	479	Cart-roads	$1\frac{1}{8}$	293	3,197
Houses for subordinate establishment	453	Add as per Accountant-General's audited figure	..	+ 1	..
Others	1,223		$1\frac{1}{8}$	294	3,197
	2,155	Add A-VII (c)	..	..	168
Add pay of establishment	748	Add as per Accountant-General's audited figure	..	..	+ 1
	2,903		$1\frac{1}{8}$	294	3,366

(a) Corrected in the Board's office.

(b) Excludes Rs. 25 incurred on repairs of tanna sheds in the Parlākimedi maliahs.

Communications

Northern

District.	New work undertaken during the year. — Buildings. — Description of building.	Expenditure incurred.	Roads and paths. — Road or path and object of the same.	Length of road or path.	Expenditure incurred.	Total expenditure on new works.
1	2	3	4	5	6	7
		RS.		MLS.	RS.	RS.
Kistna ..	Rest-houses	..	Cart-roads	$7\frac{1}{4}$	2,226	3,125
	Houses for subordinate establishment	426				
	Others	473				
	Total, Kistna ..	899		$7\frac{1}{4}$	2,226	3,125
Kurnool, East.	Rest-houses	2,026	Cart-roads	* $13\frac{1}{2}$	12	9,593
	Houses for subordinate establishment	6,117				
	Others	1,438				
	Total, Kurnool, East ..	9,581		$13\frac{1}{2}$	12	9,593
Kurnool, South.	Rest-houses	..	Cart-roads	$26\frac{7}{8}$	7,859	14,488
	Houses for subordinate establishment	5,745				
	Others	884				
	Total, Kurnool, South ..	6,629		$26\frac{7}{8}$	7,859	14,488
Kurnool, West.	Rest-houses	..	Cart-roads	$12\frac{1}{2}$	2,515	6,306
	Houses for subordinate establishment	3,775	A-VII (c)	..	..	2,346
	Others	16	Deduct as per Accountant-General's audited figure ..	..	..	— 5
				..	..	2,341
	Total, Kurnool, West ..	3,791		$12\frac{1}{2}$	2,515	8,647
Total, Northern Circle.	Rest-houses	5,106	Ghât-roads	..	..	54,703
	Houses for subordinate establishment	19,738	Cart-roads	$181\frac{3}{4}$	23,514	
			Bridle-path	5	36	
	Others	5,838	Bridge	..	252	
				$186\frac{3}{4}$	23,802	
			Add as per Accountant-General's audited figure ..	..	+ 219	
				$186\frac{3}{4}$	24,021	..
			Add A-VII (c)	..	..	2,946
			Deduct as per Accountant-General's audited figure ..	..	..	— 5
				..	..	2,941
	Total, Northern Circle ..	30,682		$186\frac{3}{4}$	24,021	57,644

* Aligned.

and Buildings—*cont.*

Repairs executed during the year.					
Buildings.		Roads and paths.			Total expended on repairs.
Nature of repairs.	Expenditure incurred.	Nature of repairs.	Length repaired.	Expenditure incurred.	
8	9	10	11	12	13
Circle—cont.					
	RS.		MLS.	RS.	RS.
Rest-houses	87	Cart-roads	$5\frac{5}{8}$	1,393	2,442
Houses for subordinate establishment	68	Ghat-roads	$14\frac{1}{2}$	386	..
Others	152	Bridle-paths	$1\frac{1}{2}$	50	..
	307		$21\frac{5}{8}$	1,829	2,442
Add pay of establishment	306	Add A-VII (c)	..	..	1,184
	613		$21\frac{5}{8}$	1,829	3,626
Rest-houses	179	Cart-roads	$26\frac{13}{16}$	3,975	8,815
Houses for subordinate establishment	21	Ghât-roads	$2\frac{3}{4}$	2,287	..
Others	1,668		..	6,262	8,815
	1,868	Add A-VII (c)	..	..	16
Add pay of establishment	685				
	2,553		$29\frac{9}{16}$	6,262	8,831
Rest-houses	211	Cart-roads	15	1,737	3,393
		Ghât-roads	13	344	..
Houses for subordinate establishment	10		28	2,081	..
Others	313	Add pay of establishment	..	65	..
	534		28	2,146	3,393
Add pay of establishment	713	Add A-VII (c)	.	..	1,102
	1,247		28	2,146	4,495
Rest-houses	117	Cart-roads	$8\frac{1}{4}$	69	807
Houses for subordinate establishment	20				
Others	47				
	184				
Add pay of establishment	588				
	772				
Deduct as per Accountant-General's audited figure	— 34				
	738		$8\frac{1}{4}$	69	807
Rest-houses	3,787	Ghât roads	$32\frac{1}{8}$	3,049	30,297
Houses for subordinate establishment	1,192	Cart roads	92	8,233	..
		Bridle-paths	$1\frac{1}{2}$	50	..
Others	5,631		$125\frac{5}{8}$	11,332	(a)30,297
		Add as per Accountant-General's audited figures	..	+ 35	..
	10,610	Add pay of establishment	..	+ 499	..
Add pay of establishment	7,856		$125\frac{5}{8}$	11,866	30,297
	18,466	A-VII (c)	..	..	2,507
Deduct as per Accountant-General's audited figure	— 35	Add as per Accountant-General's audited figure	..	..	+ 157
					2,664
	18,431		$125\frac{5}{8}$	11,866	32,961

(a) Corrected in the Board's office.

Communications

District.	New work undertaken during the year. Buildings. Description of building.	Expenditure incurred.	Roads and paths. Road or path and object of the same.	Length of road or path.	Expenditure incurred.	Total expenditure on new work.
1	2	3	4	5	6	7
						Central
		RS.		MLS.	RS.	RS.
Bellary ..	Head-quarter houses	1,969	Bridle-path	1⅛	513	..
	Rest-houses	3,918	Cart-road	3	690	..
	Houses for subordinates ..	4,957	Inspection paths	50-9-19½	1,225	..
	Others	674	....	..	..	..
	Total ..	11,518	Total ..	55-2-19½	2,428	13,946
			A-VII (c)	..	..	388
			Sinking wells Rs. 214	..	..	
			Digging trial wells Rs. 174 ..	..	..	
	Total, Bellary ..	11,518	Total ..	55-2-19½	2,428	14,334
Anantapur ..	Head-quarter houses	160	Cart-roads	12-2-0	2,255	..
	Rest-houses	4,508	....	..		..
	Others	499	....	..	..	..
	Total ..	5,167	Total ..	12-2-0	2,255	7,422
			A-VII (c)	..	..	..
			Construction of wells	..	..	1,244
	Total, Anantapur ..	5,167	Total ..	12-2-0	2,255	8,666
Guntûr ..	Rest-houses	990	Cart-road	0-7-0	5	..
	Houses for subordinates ..	68	....	..	..	..
	Others	358	....	..	..	..
	Total ..	1,416	Total ..	0-7-0	5	1,421
			A-VII (c)	..	..	..
			Construction of wells Rs. 368.	..	..	..
			Do. dam Rs 50 ..	..	..	418
	Total, Guntûr ..	1,416	Total ..	0-7-0	5	1,839
North Cuddapah.	Rest-houses	2,916	Bridle-path	5	512	..
	Houses for subordinates ..	328	Cart-road	..	567	..
	Others	140	....	..	..	..
	Total ..	3,384	Total ..	5-0-0	1,079	4,463
			A-VII (c)	..	..	476
			Fencing Rs. 249	..	..	
			Deepening wells Rs. 136 ..	..	..	
			Others Rs. 91	..	..	
	Total, North Cuddapah ..	3,384	Total ..	5-0-0	1,079	4,939

-and Buildings—*cont.*

Repairs executed during the year.					
Buildings.		Roads and paths.			Total expended on repairs.
Nature of repairs.	Expenditure incurred.	Nature of repairs.	Length repaired.	Expenditure incurred.	
8	9	10	11	12	13
Circle.					
	RS.		MLS.	RS.	RS.
Head-quarter houses	63	....	..	..	..
Rest-houses	749	....	..	..	..
Houses for subordinates	281	....	..	..	..
Others	192	....	..	..	..
Cost of establishment	294	....	..	..	..
Deduct as per Accountant-General's audited figures.	— 224	....	..	..	..
Total ..	1,355	Total ..	..	..	1,355
		A-VII (*c*) ..	..	..	..
....	..	Repairing wells Rs. 6	..	..	..
....	..	Add as per Accountant-General's audited figures Rs. 7.	..	..	13
Total ..	1,355	Total ..	..	..	1,368
Head-quarter houses	30	Cart-road	8	550	..
Rest-houses	414	Bridle-path	½	16	..
Houses for subordinates	283	Cost of establishment	..	336	..
Others	27	Add as per Accountant-General's audited figures.	..	1	..
Cost of establishment	890	....	..	..	..
Add as per Accountant-General's audited figures	4	....	..	..	..
		....	..	..	..
		Total ..	8¼	903	2,551
	..	....	..	..	..
	..	....	..	..	..
Total ..	1,648	Total ..	..	..	2,551
Head-quarter houses	2	Cart-road	1⅝	13	1,476
Rest-houses	83	Deduct as per Accountant-General's audited figures.	..	— 1	
Houses for subordinates	10	....	..	..	..
Others	288	....	..	..	..
Cost of establishment	1,081	....	..	..	..
Total ..	1,464	Total ..	1⅝	12	1,476
		Add A-VII (*c*) ..	..	..	..
....	..	Repairing salt creek Rs. 50	..	..	50
Total ..	..	Total ..	..	..	1,526
Rest-houses	523	Bridle-path	..	50	..
Others	120	Cart-roads	..	456	..
Cost of establishment	587	Others	..	10	..
...	..	Deduct as per Accountant-General's audited figures.	..	—8	..
Total ..	1,230	Total ..	..	508	1,738
		Add A-VII (*c*) ..	..	..	..
....	..	Repair of wells Rs. 191	..	..	..
....	..	Removal of silt Rs. 68	..	..	..
....	..	Others. Rs. 38	..	..	..
....	..	Deduct as per Accountant-General's audited figures Rs. 45.	..	..	252
Total ..	..	Total ..	..	..	1,990

Communications.

District.	New work undertaken during the year. Buildings: Description of buildings.	Expenditure incurred	Roads and paths: Road or path and object of the same.	Length of road or path.	Expenditure incurred.	Total expenditure on new work.
1	2	3	4	5	6	7
Central						
		RS.		MLS.	RS.	RS.
East Cuddapah.	Head-quarter houses	2,163	Cart-road	18-7-3-3	1,871	..
	Rest-houses	3,408	Bridle-path	14-0-2-0	1,533	..
	Houses for subordinates ..	1,936	....	..	..	..
	Total ..	7,507	Total ..	32-7-5-3	3,404	10,911
			A-VII (c)	..	..	..
			Sinking well 300	..	..	300
	Total, East Cuddapah ..	7,507	Total ..	32-7-5-3	3,404	11,211
Nellore ..	Head-quarter houses	3,263	....	..	..	..
	Rest-houses	1,152	....	..	..	..
	Houses for subordinates ..	3,014	....	..	..	..
	Others	591	....	..	..	..
	Total ..	8,020	Total ..	..	..	8,020
			A-VII (c)	..	..	..
	Total, Nellore ..	8,020	Total ..	..	..	8,020
Chingleput ..	Rest-houses	404	....	..	..	..
	Total ..	404	Total ..	..	..	404
			A-VII (c)	..	..	..
			Sinking a well 180	..	..	180
	Total, Chingleput ..	404	Total ..	..	..	584
Chittoor ..	Head-quarter houses	285	Cart-road	$4\frac{3}{4}$	873	..
	Rest-houses	3,389	....	..	..	..
	Houses for subordinates ..	230	....	..	..	..
	Total ..	3,904	Total ..	4-6-0-0	873	4,777
			A-VII (c)	..	..	..
			Sinking wells Rs. 410 ..	..	..	..
			Digging a trial well Rs. 19 ..	..	..	429
	Total, Chittoor ..	3,904	Total ..	4-6-0-0	873	5,206

and Buildings—*cont*

Repairs executed during the year.					
Buildings.		Roads and paths.			Total expended on repairs.
Nature of repairs.	Expenditure incurred.	Nature or repairs.	Length repaired.	Expenditure incurred.	
8	9	10	11	12	13
Circle—cont.					
	RS.		MLS.	RS.	RS.
Head-quarter houses	676	Cart-road	..	1,576	..
Rest-houses	450	Add as per Accountant-General's audited figures.	..	6	..
Houses for subordinates	58	....	.	..	..
Others	8	....	..	..	..
Cost of establishment	615	....	..	..	..
Total ..	1,807	Total ..	..	1,582	3,389
		A-VII (*c*) ..	..	..	..
....	..	Repairing well Rs. 7	..	..	..
....	..	Removal of silt Rs. 31	..	..	38
Total ..	1,807	Total ..	..	1,582	3,427
Head-quarter houses	15	Bridle-path	3	93	..
Rest-houses	40	Deduct as per Accountant-General's audited figures.	..	— 12	..
Houses for subordinates	73	....	..	..	..
Cost of establishment	999	....	..	..	..
Total ..	1,127	Total ..	3-0-0-0	81	1,208
		A-VII (*c*) ..	..	..	..
....	..	Removal of silt Rs. 2	..	..	..
....	..	Others Rs. 68	..	..	70
Total ..	1,127	Total ..	3-0-0-0	81	1,278
Rest-houses	87	Cart-road	5	26	..
Houses for subordinates	107	Ghat road	..	54	..
Others	85	....	..	..	..
Add as per Accountant-General's audited figures.	20	Deduct as per Accountant-General's audited figures	..	— 7	..
Total ..	299	Total ..	5-0-0-0	73	372
		....	..	..	..
		....	..	..	..
Total ..	299	Total ..	5-0-0-0	73	372
Head-quarter houses	3	Bridle-path	10	20	..
Rest-houses	312	Cart-roads	49	1,042	..
Houses for subordinates	253	Others	..	4	..
Others	21	....	..	2	..
Cost of establishment	977	Add as per Accountant-General's audited figures.	..	..	..
Total ..	1,566	Total ..	59	1,068	2,634
		A-VII (*c*) ..	..	..	..
....	..	Clearing silt in wells Rs. 5	..	..	..
....	..	Others Rs 43	..	..	39
....	..	Deduct as per Accountant-General's audited figures Rs. 9.	..	..	..
Total ..	1,566	Total ..	59	1,068	2,673

Communications

District.	New work undertaken during the year.					
	Buildings.		Roads and paths.			Total expenditure on new work.
	Description of building.	Expenditure incurred.	Road or path and object of the same.	Length of road or path.	Expenditure incurred.	
1	2	3	4	5	6	7
						Central
		RS.		MLS.	RS.	RS.
Total, Central Circle.	Head-quarter houses	7,840	Birdle-path	20-1-2 0	2,558	..
	Rest-houses	20,685	Cart-road	39-6-3-3	6,261	..
	Houses for subordinates ..	10,533	Inspection paths	50-9-19-1½	1,225	..
	Others	2,262	....	..	..	..
	Total ..	41,320	Total ..	111-0-24-4½	10,044	51,364
			A VII (c)	..	..	3,435*
			Sinking wells	..	2,852	
			Digging trial wells	..	193	
			Constructing dams	..	50	
			Fencing	..	249	
			Others	..	91	
	Total, Central Circle ..	41,320	Total ..	111-0-24-4½	13,479	54,799
						Southern
Vellore, North.	Head-quarter houses	1,798	Ghat-road	¼	148	4,586
	Rest-houses	138	Cart-road	6	1,309	..
	Houses for subordinate establishments	1,258				
	Others	16				
	Deduct as per Accountant-General's audited figure.	— 81				
	Total, Vellore North ..	3,129	Total ..	6¼	1,457	4,586
Vellore, South.	Rest-houses	5,533	*Bridle-path	3	58	6,026
	Others	15	Cart-road	13	399	..
			Others	..	21	..
	Total, Vellore South ..	5,548	Total ..	16	478	6,026
South Arcot ..	Rest-houses	764	....	..	..	1,903
	Houses for subordinate establishments	1,142				
		1,906				
	Deduct cash recovery ..	— 3				
	Total, South Arcot ..	1,903	Total ..	..	..	1,903
Salem, North ..	Rest-houses	8,736	Bridle-path	1½	226	10,535
	Houses for subordinate establishments	470	Cart-roads	21½	* 639	..
	Others	251	Others	..	213	..
	Total, Salem North ..	9,457	Total ..	23	1,078	10,535

* Includes cost of preliminary tracing of 18 miles.

and Buildings—*cont.*

Repairs executed during the year.					
Buildings.		Roads and paths.			Total ex-pended on repairs.
Nature of repairs.	Expendi-ture incurred.	Nature of repairs.	Length repaired.	Expendi-ture incurred.	
8	9	10	11	12	13
Circle—cont.					
	RS.		MLS.	RS.	RS.
Head-quarter houses	789	Bridle-path	13	179	..
Rest-houses	2,658	Cart-road	64	3,663	..
Houses for subordinates	1,065	Ghat-road	..	54	..
Others	741	Others	..	14	..
Cost of establishment	5,443	Cost of establishments	..	336	..
Variations as per Accountant-General's audited figures	— 200	Deduct variations as per Accountant-General's audited figures.	..	19	..
Total ..	10,496	Total ..	77	4,227	14,723
		Add A-VII (*c*) ..	..	..	..
....	..	Repairing wells	..	204	
....	..	Do. salt creek	..	50	
....	..	Removing silt	..	106	462
....	..	Others	..	149	
....	..	Deduct as per Accountant-General's audited figures.	..	— 47	
Total ..	10,496	Total ..	77	4,689	15,185
Circle.					
Head-quarter houses	136	Bridle-paths	3½	145	5,169
Rest-houses	1,226	Ghat-road	2¼	200	..
Houses for subordinate establishments	120	Cart-road	46	2,229	..
Other works	473	Others	..	16	..
		Deduct as per Accountant-General's audited figure	..	— 30	..
	1,955	Add A-VII (*c*) ..	..	..	321
Add pay of establishment ..	654	Deduct as per Accountant-General's audited figure	..	..	— 34
Total ..	2,609	Total ..	51¾	2,560	5,456
Head-quarter houses	109	Ghat-road	5	3,574	6,040
Rest-houses	544	Cart-road	22¾	1,242	..
Houses for subordinate establishments	10	Add A-VII (*c*) ..	..	..	483
Others	22				
	685				
Add pay of establishments ..	548				
	1,233				
Deduct cash recovery	9				
Total ..	1,224	Total ..	27¾	4,816	6,523
Head-quarter houses	27		..	..	539
Rest-houses	23				
Houses for subordinate establishments	38	Add A-VII (*c*) ..	..	..	111
	88				
Add pay of establishment ..	542				
	630				
Deduct cash recovery	91				
Total ..	539	Total ..	..	..	650
Head-quarter houses	235	Cart-road	121	3,259	4,982
Rest-houses	1,223	Add as per Accountant-General's audited figure	..	8	..
Others	44	Add A-VIII (*c*) ..	..	..	686
	1,502				
Add pay of establishment	213	Deduct as per Accountant-General's audited figure	..	..	— 24
Total ..	1,715	Total ..	121	3,267	5,644

Communications

District.	New work undertaken during the year. Buildings. Description of building.	Expenditure incurred.	Roads and paths. Road or path and object of the same.	Length of road or path.	Expenditure incurred.	Total expenditure on new work.
1	2	3	4	5	6	7
						Southern
		RS.		MLS.	RS.	RS.
Salem, South..	Head-quarter houses	1,309	Bridle-path	23	* 3,822	12,776
	Rest-houses	5,001	Cart-road	23½	† 194	..
	Houses for subordinate establishments	2,420				
	Others	30				
	Total, Salem South ..	8,760	Total ..	46½	4,016	12,776
Trichinopoly.	Rest-houses	2,737	....	..	..	2,829
	Houses for subordinate establishments	68				
	Others	24				
	Total, Trichinopoly ..	2,829	Total ..	..	..	2,829
Madura ..	Rest-houses	3,320	Bridle-path	7	815	13,646
	Houses for subordinate establishments	6,503	Cart-road	8	2,860	..
			Others	..	148	..
	Total, Madura ..	9,823	Total ..	15	3,823	13,646
Tinnevelly ..	Head-quarter houses	136	Bridle-path	5⅝	978	5,063
	Rest-houses	635	Bridge	..	202	..
	Houses for subordinate establishments	2,837	Cart-road	¼	256	..
			Others	..	19	..
	Total, Tinnevelly ..	3,608	Total ..	5⅞	1,455	5,063
Total, Southern Circle.	Head-quarter houses	3,243	Ghat-road	¼	148	57,364
	Rest-houses	26,864	Bridle-path	40⅛	5,899	..
	Houses for subordinate establishments	14,698	Cart-road	72¼	5,657	..
	Others	336	Bridge	..	202	..
			Others	..	401	..
		45,141				
	Deduct cash recovery ..	— 3				
		45,138				
	Deduct as per Accountant-General's audited figure.	— 81				
	Total, Southern Circle ..	45,057	Total ..	112⅝	12,307	57,364
						Western
South Canara..	....	..	(a) Cart roads	9	2,399	..
			(e) Others	5	347	..
	Total, South Canara ..	..	Total ..	14	2,746	2,746

* Includes cost of preliminary tracing of 11½ miles. † Cost of preliminary tracing.

and Buildings—*cont.*

Repairs executed during the year.					
Buildings.		Roads and paths.			Total expended on repairs.
Nature of repairs.	Expenditure incurred.	Nature of repairs.	Length repaired	Expenditure incurred.	
8	9	10	11	12	13
Circle—cont.	RS.		MLS.	RS.	RS.
Head-quarter houses	26	Bridle-paths	½	66	977
Rest-houses	14	Cart-roads	8	258	..
Others	65				
	105	Add A-VII (*c*) ..	..	..	624
Add pay of establishment	548				
Total ..	653	Total ..	8½	324	1,601
Head-quarter houses	88	Ghat-road	7	395	5,748
Rest-houses	1,270	Bridle-path	38½	1,253	..
Others	97	Cart-road	79⅜	2,081	..
	1,455	....	..	3,729	5,748
Add pay of establishment	925	Deduct cash recovery of service payment	..	— 356	..
	2,380	Add A-VII (*c*) ..	..	..	364
Deduct cash recovery of service payments	— 5				
Total ..	2,375	Total ..	124⅞	3,373	6,112
Head-quarter houses	52	Cart-road	76¼	6,922	9,174
Rest-houses	582				
Houses for subordinate establishments	490	Others	..	24	..
Others	9	Add A-VII (*c*) ..	..	..	576
	1,133	Add as per Accountant-General's audited figure	..	..	5
Add pay of establishment.. ..	1,095				
Total ..	2,228	Total ..	76¼	6,946	9,755
Head-quarter houses	180	Ghat-road	3	753	3,293
Rest-houses	475	Bridge	..	37	..
Houses for subordinate establish-		Bridle-path	27⅛	447	..
ments	364	Cart-road	29⅜	804	..
Others	223	Others	..	10	..
		Add A-VII (*c*) ..	..	..	676
Total ..	1,242	Total ..	59½	2,051	3,969
Head-quarter houses	853	Ghat-road	17¼	4,922	..
Rest-houses	5,357	Bridle-path	69⅝	1,911	..
Houses for subordinate establish-		Bridge	..	37	..
ments	1,022	Cart-road	382¾	16,795	..
Others	933	Others	..	50	..
	8,165	....	469⅝	23,715	..
Add pay of establishments ..	4,525	Deduct cash recovery of service payment	..	— 356	..
	12,690		469⅝	23,359	35,922
Deduct cash recovery	— 105	Deduct as per Accountant-General's audited figure	..	— 22	
		Add A-VII (*c*) ..	..	..	3,841
		Deduct as per Accountant-General's audited figure	..	..	— 53
Total ..	12,585	Total ..	469⅝	23,337	39,710
Circle.					
Head-quarter houses	185	Cart-roads	6	147	} 1,221
Rest-houses	67	Others	9	170	
Houses for subordinate establishments.	138		..	..	..
Others	160	....	..	..	..
Add pay of watchers	356		..	..	..
Deduct cash recovery of service payments.	—2	Add A-VII (*c*) ..	..	..	608
Total ..	904	Total ..	15	317	1,829

Communications

District.	New work undertaken during the year.					
	Buildings.		Roads and paths.			Total expenditure on new work.
	Description of building.	Expenditure incurred.	Road or path and object of the same.	Length of road or path.	Expenditure incurred	
1	2	3	4	5	6	7
						Western
		RS.		MLS.	RS.	RS.
Malabar, North.	Rest-houses	1,715	Cart roads	11	238	..
	Houses for subordinate establishments.	1,600	Bridle-paths	..	12	..
			Bridges	..	2,310	..
	Others	147	Others	1	285	..
	Total, North Malabar ..	3,462	Total ..	12	2,845	6,307
Malabar, South.	Head-quarter houses	172	Cart roads	..	5	..
	Rest-houses	716	Bridle-paths	10	126	..
	Houses for subordinate establishments.	867	Bridges	..	28	..
	Others	70				
	Total, South Malabar ..	1,825	Total ..	10	159	1,984
The Nilgiris ..	Rest-houses	3,891	Cart roads	..	11	..
	Houses for subordinate establishments.	1,772	Bridle-paths	13	1,108	..
	Others	227				
	Total, The Nilgiris ..	5,890	Total ..	13	1,119	7,009
Kollegal ..	Head-quarter houses .. .	1,328	Cart roads	3	2,422	..
	Rest-houses	5,219	Ghat roads	1	71	..
	Houses for subordinate establishments.	504				
	Total, Kollegal ..	7,051	Total ..	4	2,493	9,544
Coimbatore, North.	Head-quarter houses	982	Cart roads	12	1,552	..
	Rest-houses	2,939	Ghat roads	5	2,230	..
	Houses for subordinate establishments.	3,629				
	Others	756				
	Total, Coimbatore, North ..	8,306	Total ..	17	3,782	12,088
Coimbatore, Central.	Head-quarter houses	1,667	Cart roads	6	920	..
	Rest-houses	4,958	Bridle-paths	..	14	..
	Houses for subordinate establishments.	528				
	Others	40				
	Total, Coimbatore, Central ..	7,193	Total ..	6	934	8,127

and Buildings—*cont.*

Repairs executed during the year.					
Buildings.		Roads and paths.			Total expended on repairs.
Nature of repairs.	Expenditure incurred.	Nature of repairs.	Length repaired.	Expenditure incurred.	
8	9	10	11	12	13
Circle—cont.					
	RS.		MLS.	RS.	RS.
Head-quarter houses	172	Cart roads	105	3,778	
Rest-houses	513	Bridle-paths	18	317	
Houses for subordinate establishments.	712	Bridges	..	271	} 6,420
Others	262	Others	1	56	
Add pay of watchers, etc.	339	Add A-VII (*c*) ..	..	..	1,770 * —1
Total ..	1,998	Total ..	124	4,422	8,189
Head-quarter houses	506	Cart roads	21	3,170	} 4,444
Rest-houses	133	Bridle-paths	65	183	
Houses for subordinate establishments.	318	....	..	..	..
Others	32		..	..	..
Add pay of watchers	102		..	..	..
		Add A-VII (*c*) ..	..	..	201
Total ..	1,091	Total ..	86	3,353	4,645
Rest-houses	587	Cart roads	50	4,150	} 5,894
Houses for subordinate establishments.	1,014	Bridle-paths	3	30	
Others	113				
		Add A-VII (*c*) ..	..	..	2,377
Total ..	1,714	Total ..	53	4,180	8,271
Head-quarter houses	42	Cart roads	55	5,666	
Rest-houses	613	Ghat roads	2	237	} 7,295
Houses for subordinate establishments.	251			* +1	
Others	50		..	..	..
Add pay of watchers	435	Add A-VII (*c*) ..	..	..	2,311
Total ..	1,391	Total ..	57	5,904	9,606
Rest-houses	349	Cart roads	41	1,463	
Houses for subordinate establishments.	67	Ghat roads	49	5,094	} 7,633
				* —1	
Others	45				
Add pay of watchers	616		..	..	..
		Add A-VII (*c*) ..	..	..	759
Total ..	1,077	Total ..	90	6,556	8,392
Head-quarter houses	103	Cart roads	23	2,708	3,744
Rest-houses	458	....	..	..	..
Houses for subordinate establishments.	269		..	..	..
Others	198		..	..	..
Add pay of watchers	8		..	..	..
		Add A-VII (*c*) ..	..	.	273
Total ..	1,036	Total ..	23	2,708	4,017

* Added or deducted as per Accountant-General's audited figures.

Communications

District.	New work undertaken during the year.					
	Buildings.		Roads and paths.			Total expenditure on new work.
	Description of building.	Expenditure incurred.	Road or path and object of the same.	Length of road or path.	Expenditure incurred.	
1	2	3	4	5	6	7
						Western
		RS.		MLS.	RS.	RS.
Coimbatore, South.	Rest-houses	20	Cart roads	1	240	..
	Houses for subordinate establishments.	1,896	Ghat roads	1	1,308	..
	Others	295				
	Total ..	2,211	Total ..	2	1,548	3,759
Direction ..	....	..	....	..	..	..
Total, Western Circle.	Head-quarter houses	4,149	Cart roads	42	7,787	..
	Rest-houses	19,458	Bridle-paths	23	1,260	..
	Houses for subordinate establishments.	10,796	Ghat roads	7	3,609	..
			Bridges	..	2,338	..
	Others	1,535	Others	6	632	..
	Total, Western Circle ..	35,938	Total ..	78	15,626	51,564
Total, Presidency.	Head-quarter houses	15,232	Cart roads	335½	43,219	
	Rest-houses	72,113	Bridle-paths	88	9,753	
	Houses for subordinate establishments.	55,765	Ghat roads	7¼	3,757	
			Bridges	..	2,792	2,14,776
	Others	9,971	Cthers	6	1,033	
			Inspection-paths	51	1,225	
	Total ..	1,53,081	Total ..	487¾	61,779	2,14,776
	Deduct cash recoveries	3	Add as per Accountant-General's figures.	..	..	219
	Deduct as per Accountant-General's audited figures.	81				
	Grand total, Presidency ..	1,52,997	Total ..	488	61,779	2,14,995

and Buildings—*cont.*

Repairs executed during the year.					
Buildings.		Roads and paths.			Total expended on repairs.
Nature of repairs.	Expenditure incurred.	Nature of repairs.	Length repaired.	Expenditure incurred.	
8	9	10	11	12	13

Circle—cont.

	RS.		MLS.	RS.	RS.
Head-quarter houses	174	Cart-roads	18	2,112	6,621
		Bridle-paths	2	9	
Rest-houses	1,265	Ghat-roads	4	421	
Houses for subordinate establishments.	1,014	Bridges	..	440	
		Others	..	248	
Others	190	Add pay of temporary establishment ..	..	304 * +1	
Add pay of watchers	443				
		Add A-VII (*c*) ..	..	..	197
Total ..	3,086	Total ..	24	3,535	6,818
Others	313	....	..	..	313
Head-quarter houses	1,182	Cart-roads	319	23,194	43,585
Rest-houses	3,985	Bridle-paths	88	539	
Houses for subordinate establishments.	3,783	Ghat-roads	55	5,752	
		Bridges	..	711	
Others	1,363	Others	10	474	
Add pay of watchers	2,299	Add pay of temporary establishment ..	..	304	
Deduct cash recovery of service payments.	— 2	....	..	* +1	
		Add A-VII (*c*) ..	..	..	8,495
Total ..	12,610	Total ..	472	30,975	52,080
Head-quarter houses	2,824	Cart-roads	$857\frac{3}{4}$	51,885	1,24,888
Rest-houses	15,787	Bridle-paths	$172\frac{1}{8}$	2,679	
Houses for subordinate establishments.	7,062	Ghat-roads	$104\frac{3}{8}$	13,777	
		Bridges	..	748	
Others	8,668	Others	10	538	
Total .	34,341	Total ..	$1,144\frac{2}{8}$	69,627	..
Add pay of establishments	20,123	Add pay of establishment	..	1,139	..
Total ..	54,464	Total ..	$1,144\frac{2}{8}$	70,766	1,24,888
Deduct as per Accountant-General's figures.	342	Deduct cash recoveries	..	..	356
		,, as per Accountant-General's figures.	..	..	5
Total ..	54,122	Total ..	1,144	70,766	1,24,527
		Add A-VII (*c*) ..	..	..	21,785
Total ..	..	Total ..	1,144	70,766	1,46,312

* Added or deducted as per Accountant-General's audited figures.

ANNUAL
Forest Department,
REGISTER of Breaches of

District.		Cases pending from 1911-12.	New cases of the year.					Total cases.
			Injury to forest by fire.	Un-authorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	
1		2	3	4	5	6	7	8
								NORTHERN *Reserved*
Ganjām	A	22	2	63	20	2	87	109
	B	140	1	335	53	11	400	540
	C	..	92	31	..	..	123	..
	Total ..	(a) 162	(b) 95	(c) 429	(d) 73	(e) 13	(f) 610	(g) 649
Vizagapatam ..	A	80	1	91	18	15	125	205
	B	49	1	209	39	11	260	309
	C	..	..	3	..	..	3	..
	Total ..	129	2	303	57	26	388	514
Gōdāvari, Upper.	A	5	1	1	..	..	2	7
	B	7	1	28	1	..	30	37
	C	..	18	..	..	..	18	..
	Total ..	12	20	29	1	..	50	44
Gōdāvari, Lower.	A	46	2	43	16	..	61	107
	B	79	..	213	32	17	262	341
	C	..	..	..	..	..	..	..
	Total ..	125	2	256	48	17	323	448
Kistna ..	A	20	..	39	28	3	70	90
	B	61	..	149	197	14	360	421
	C	..	..	15	..	1	16	..
	Total ..	81	..	203	225	18	446	511
Kurnool East ..	A	8	1	10	25	10	46	54
	B	20	..	36	76	42	154	174
	C		..	1	2	1	4	..
	Total ..	28	1	47	103	53	204	228
Do. South..	A	37	..	86	52	7	145	182
	B	20	..	193	96	16	305	325
	C	..	..	18	..	1	19	..
	Total ..	57	..	297	148	24	469	507
Do. West ..	A	89	1	183	27	12	223	312
	B	57	1	135	117	8	261	318
	C	..	29	24	4	..	57	..
	Total ..	146	31	342	148	20	541	630

A = Cases taken to Court.
B = Case compounded by District Forest officer or Revenue Divisional officer.
C = Cases undetected.
(a) Excludes 67 cases belonging to the Parlakimedi maliahs.
(b) Do. 9 do. do.
(c) Do. 160 do. do.
(d) Do. 17 do. do.
(e) Do. 32 do. do.
(f) Do. 218 do. do.
(g) Do. 285 do. do.

Form No. 71.

Madras Presidency.

Forest Rules during 1912–13.

Disposed of during the year.						Cases pending at close of the year.
Convictions.		Acquittals.		Total.		
Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
9	10	11	12	13	14	15
CIRCLE.						
Forests.						
82	258	5	17	87	275	22
412	1,425	..	..	412 * 71	1,425 231	57
..	..	..	..	..	..	..
(a) 494	(b) 1,683	(c) 5	(d) 17	499 (e) * 71	(f) 1,700 231	(g) 79
161	572	31	145	192	717	13
246	541	..	..	246 * 11	541 23	52
..	..	..	..	..	..	..
407	1,113	31	145	438 * 11	1,258 23	65
4	10	2	22	6	32	1
29	51	..	..	29 * 3	51 10	5
..	..	..	..	.	..	..
33	61	2	22	35 * 3	83 10	6
79	190	6	34	85 * 1	224 ..	21
254	660	..	..	254 * 19	660 115	68
..	..	..				
..	..	.	..	..	..	..
333	850	6	34	339 * 20	884 115	89
72	200	1	1	73	201	17
313	868	..	..	313 * 46	868 157	62
..	..	..	..	..	..	..
385	1,068	1	1	386 * 46	1,069 157	79
41	115	2	2	43	117	11
128	285	..	..	128 * 22	285 88	24
..	.	..	..	..	..	
169	400	2	2	171 * 22	402 88	35
138	296	25	59	163	365	19
227	486	..	..	227 * 49	486 176	49
..	..	..	..	.	..	..
365	782	25	59	390 * 49	841 176	68
249	671	15	63	264	754	48
223	617	..	..	223 * 43	617 113	52
..	..	..	..		..	..
472	1,288	15	63	487 * 43	1,351 113	100

* Withdrawn under the orders of the District Forest or Revenue Divisional officer.
(a) Excludes 178 cases belonging to the Parlakimedi maliahs.
(b) Excludes 486 persons involved in the 178 cases in the Parlakimedi maliahs.
(c) Excludes 33 cases belonging to the Parlakimedi maliahs.
(d) Excludes 104 persons involved in the 33 cases belonging to the Parlakimedi maliahs.
(e) Excludes 219 cases belonging to the Parlakimedi maliahs.
(f) Excludes 590 persons involved in the 219 cases belonging to the Parlakimedi maliahs.
(g) Excludes 66 cases belonging to the Parlakimedi maliahs.

Register of Breaches of

District.		Cases pending from 1911-12.	New cases of the year. Injury to forest by fire.	Un-authorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	Total cases.
1		2	3	4	5	6	7	8
								NORTHERN
								Reserved
Total for reserved forests,	A	307	8	516	186	49	759	1,066
	B	(*a*) 433	4	1,298	611	119	2,032	2,465
	C	..	139	92	6	3	240	..
	Total ..	740	151	1,906	803	171	3,031	3,531
								Unreserved
Ganjām	A	2	..	31	..	..	31	33
	B	29	..	130	..	..	130	159
	C	..	..	34	..	..	34	..
	Total ..	31	..	195	..	..	195	192
Vizagapatam ..	A	..	..	6	..	..	6	6
	B	..	..	14	..	..	14	14
	C	..	..	..	..	..	..	..
	Total ..	..	..	20	..	..	20	20
Gōdāvari, Upper.	A	9	..	..	..	..	..	9
	B	8	..	11	..	..	11	19
	C	..	..	..	..	..	..	..
	Total ..	17	..	11	..	..	11	28
Do. Lower.	A	2	..	4	..	..	4	6
	B	16	..	51	..	..	51	67
	C	..	..	..	..	..	..	..
	Total ..	18	..	55	..	..	55	73
Kistna	A	1	..	..	..	..	..	1
	B	9	2	79	..	1	82	91
	C	..	1	24	..	..	25	..
	Total ..	10	3	103	..	1	107	92
Kurnool, East ..	A	..	..	1	..	..	1	1
	B	..	..	83	..	..	83	83
	C	..	..	3	..	..	3	..
	Total ..	..	..	87	..	..	87	84
Do. South ..	A	..	..	6	..	..	6	6
	B	..	..	103	..	..	103	103
	C	..	..	7	..	..	7	..
	Total ..	..	..	116	..	..	116	109
Do. West ..	A	..	..	7	..	1	8	8
	B	..	..	39	..	2	41	41
	C	..	..	8	..	..	8	..
	Total ..	..	..	54	..	3	57	49

A = Cases taken to Court.
B = Case compounded by District Forest officer or Revenue Divisional officer.
C = Cases undetected.
(*a*) Corrected in the Board's office.

Forest Rules during 1912–13—*cont.*

Disposed of during the year.						Cases pending at close of the year.
Convictions.		Acquittals.		Total.		
Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
9	10	11	12	13	14	15
CIRCLE—*cont.*						
Forests—cont.						
826	2,312	87	343	913 * 1	2,655 ..	152
1,832	4,933	..	..	1,832 * 264	4,933 913	369
..	..	..	..	..	..	..
2,658	7,245	87	343	2,745 * 265	7,588 913	521
Lands.						
24	70	2	15	26	85	7
115	280	..	..	115 * 32	280 87	12
..	..	..	..	..	..	..
139	350	2	15	141 * 32	365 87	19
6	6	..	..	6	6	..
8	8	..	..	8	8	6
..	..	..	.	..	..	..
14	14	..	..	14	14	6
4	6	3	6	7 * 2	12 5	..
8	10	1	4	9 * 7	14 9	3
..	..	..	..	..	..	..
12	16	4	10	16 * 9	26 14	3
2	2	1	1	3	3	3
58	58	..	..	58	58	9
..	..	..	..	..	..	..
60	60	1	1	61	61	12
1	1	..	..	1	1	..
59	106	..	..	59 * 12	106 23	20
..	..	..	..	..	..	..
60	107	..	..	60 * 12	107 23	20
1	3	..	..	1	3	..
83	154	..	..	83	154	..
..	..	..	..	..	..	..
84	157	..	..	84	157	..
6	14	..	..	6	14	..
102	192	..	..	102 * 1	192 2	..
..	..	..	..	..	..	..
108	206	..	..	108 * 1	206 2	..
7	16	..	..	7	16	1
37	93	..	..	37 * 1	93 6	3
..		..	..	..	..	..
44	109	..	..	44 * 1	109 6	4

* Withdrawn under the orders of the District Forest or Revenue Divisional officer

Register of Breaches of Forest

District.		Cases pending from 1911-12.	New cases of the year. Injury to forests by fire.	Un-authorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	Total cases.
1		2	3	4	5	6	7	8
								NORTHERN *Unreserved*
Total for unreserved lands.	A	14	..	55	..	1	56	70
	B	62	2	510	.	3	515	577
	C	..	1	76	..	..	77	..
	Total ..	76	3	641	..	4	648	647
Total for reserved forests and unreserved lands.	A	321	8	571	186	50	815	1,136
	B	495	6	1,808	611	122	2,547	3,042
	C	..	140	168	6	3	317	..
	Grand Total ..	816	154	2,547	803	175	3,679	4,178
								CENTRAL *Reserved*
Bellary	A	† 79	2	61	79	17	159	238
	B	† 120	1	282	405	20	708	828
	C	..	33	1	12	..	46	..
	Total ..	199	36	344	496	37	913	1,066
Anantapur ..	A	50	.	139	110	15	264	314
	B	..	..	169	137	6	312	312
	C	..	164	15	109	1	289	..
	Total ..	50	164	323	356	22	865	626
Guntūr	A	27	..	105	164	5	274	301
	B	231	..	490	705	19	1,214	1,445
	C	..	..	..	..	..	..	..
	Total ..	258	..	595	869	24	1,488	1,746
Cuddapah, North ..	A	36	2	91	58	3	154	190
	B	32	1	165	90	9	265	297
	C	..	..	6	..	..	6	..
	Total ..	68	3	262	148	12	425	487
Cuddapah, East..	A	† 22	6	68	24	3	101	123
	B	† 75	1	405	176	7	589	664
	C	..	..	5	..	..	5	..
	Total ..	‡ 97	7	478	200	10	695	787
Nellore	A ..	106	1	161	205	17	384	490
	B	249	1	285	549	14	849	1,098
	C	..	23	2	1	..	26	..
	Total ..	(*a*) 355	25	448	755	31	1,259	1,588
Chingleput ..	A	3	..	75	35	1	111	114
	B	142	..	585	369	12	966	1,108
	C	..	2	..	..	..	2	..
	Total ..	145	2	660	404	13	1,079	1,222

A = Cases taken into Court.
B = Cases compounded by District Forest officer or Revenue Divisional officers.
C = Cases undetected.
† The variations between the closing balance of 1911-12 and the opening balance of 1912--13 are due to transfers between A and B.
‡ The difference of 1 is due to the inclusion of an undetected case in the last year's closing balance.
(*a*) Revised figure.

Rules during 1912-13—*cont.*

Disposed of during the year.						Cases pending at close of the year.
Convictions.		Acquittals.		Total.		
Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
9	10	11	12	13	14	15
CIRCLE—*cont.*						
Lands—cont.						
51	118	6	22	57 * 2	140 5	11
470	901	1	4	471 * 53	905 127	53
..	..	..	..	..	..	..
521	1,019	7	26	528 * 55	1,045 132	64
877	2,430	93	365	970 * 3	2,795 5	163
2,302	5,834	1	4	2,303 * 317	5,838 1,040	422
..	..	..	..	..	..	..
3,179	8,264	94	369	3,273 * 320	8,633 1,045	585
CIRCLE.						
Forests.						
207	577	20	141	227	718	11
615	1,805	..	..	615	1,805	129
..	..	..	..	* 84	217	..
822	2,382	20	141	842 * 84	2,523 217	140
139	391	97	383	236	774	78
312	758	..	..	312	758	..
..	..	..	..	..	..	..
451	1,149	97	383	548	1,532	78
257	824	23	175	280	999	21
1,057	3,406	..	..	1,057	3,406	332
..	..	..	..	* 56	212	..
1,314	4,230	23	175	1,337 * 56	4,405 212	353
129	467	21	107	150 * 7	574 13	33
264	673	..	..	264 * 17	673 34	16
..	..	..	..			..
393	1,140	21	107	414 * 24	1,247 47	49
103	264	3	13	106	277	17
493	1,135	..	..	493	1,135	123
..	..	..	..	* 48	108	..
596	1,399	3	13	599 * 48	1,412 103	140
403	955	52	193	455	1,148	35
830	1,754	..	..	830	1,754	142
..	..	..	..	* 126	331	..
1,233	2,709	52	193	1,285 * 126	2,902 331	177
108	198	1	1	109	199	5
798	1,553	..	..	798	1,553	251
..	..	..	..	* 59	171	..
906	1,751	1	1	907 * 59	1,752 171	256

* Cases withdrawn under the orders of the District Forest Officer or Revenue Divisional officer.

Register of Breaches of Forest

District.		Cases pending from 1911-12.	New cases of the year.					Total cases.
			Injury to forests by fire.	Un-authorized felling or appropria-tion of wood and minor forest pro-duce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	
1		2	3	4	5	6	7	8
								CENTRAL
								Reserved
Chittoor	A	† 93	..	122	91	18	231	324
	B	† 184	..	531	403	73	1,007	1,191
	C	..	45	..	..	..	45	..
	Total ..	277	45	653	494	91	1,283	1,515
Total for reserved forests	A	416	11	822	766	79	1,678	2,094
	B ..	1,033	4	2,912	2,834	160	5,910	6,943
	C	..	267	29	122	1	419	..
	Total ..	1,449	282	3,763	3,722	240	8,007	9,037
								Unreserved
Bellary	A	5	..	81	..	3	84	89
	B	9	..	263	..	6	269	278
	C	..	..	27	..	..	27	..
	Total ..	14	..	371	..	9	380	367
Anantapur ..	A	19	..	117	..	..	117	136
	B	..	..	165	..	2	167	167
	C	..	..	24	..	..	24	..
	Total ..	19	..	306	..	2	308	303
Guntūr	A	4	..	25	..	..	25	29
	B	37	1	365	..	7	373	410
	C	..	..	..	..	..	..	..
	Total ..	41	1	390	..	7	398	439
Cuddapah, North ..	A	..	..	..	..	..	..	..
	B	..	..	55	..	..	55	55
	C	..	..	..	..	..	..	..
	Total ..	..	..	55	..	..	55	55
Cuddapah, East	A	..	..	..	..	..	..	..
	B	..	..	24	..	..	24	24
	C	..	..	4	..	..	4	..
	Total ..	..	..	28	..	..	28	24
Nellore	A	24	..	22	..	..	22	46
	B ..	40	..	306	..	..	306	346
	C	..	..	92	..	..	92	..
	Total ..	(a) 64	..	420	..	..	420	392
Chingleput ..	A	..	..	4	..	..	4	4
	B	..	..	155	..	14	169	169
	C	..	..	..	..	..	..	..
	Total ..	..	..	159	..	14	173	173
Chittoor	A	..	..	..	..	..	..	..
	B	..	..	69	..	..	69	69
	C	..	..	..	..	..	..	..
	Total ..	..	..	69	..	..	69	69

A = Cases taken into Court.
B = Case compounded by District Forest officer or Revenue Divisional officer.
C = Cases undetected.
† The variations between the closing balance of 1911-12 and the opening balance of 1912-13 are due to transfers between A and B.
(a) Revised figures.

Rules during 1912-13—*cont.*

Disposed of during the year.						Cases pending at close of the year.
Convictions.		Acquittals.		Total.		
Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
9	10	11	12	13	14	15
CIRCLE—*cont.*						
Forests—cont.						
260	536	30	66	290	602	34
1,034	2,395	..	..	1,034	2,395	74
..	..	..	..	* 83	145	..
1,294	2,931	30	66	1,324	2,997	108
				* 83	145	
1,606	4,212	247	1,079	1,853	5,291	234
				* 7	13	
5,403	13,479	..	..	5,403	13,479	1,067
..	..	..	..	* 473	1,213	..
7,009	17,691	247	1,079	7,256	18,770	1,301
				* 480	1,226	
Lands						
77	95	10	27	87	122	2
248	429	..	..	248	429	30
..	..	..	..	..	..	..
325	524	10	27	335	551	32
43	95	29	57	72	152	64
167	242	..	..	167	242	..
..	..	..	..	..	..	..
210	337	29	57	239	394	64
15	49	2	4	17	53	12
250	738	..	..	250	738	57
..	..	..	..	* 103	81	..
265	787	2	4	267	791	69
				* 103	81	
..	..	..	..	..	..	
55	83	..	..	55	83	..
..	..	..	..	..	..	..
55	83	..	..	55	83	..
..	..	..	..	..	..	..
24	35	..	..	24	35	..
..	..	..	..	..	..	..
24	35	..	..	24	35	..
28	35	12	30	40	65	6
284	473	..	..	284	473	62
..	..	..	..	..	..	..
312	508	12	30	324	538	68
..	..	..	..	..	..	4
153	232	..	..	153	232	3
..	..	..	..	* 13	29	..
153	232	..	..	153	232	7
				* 13	29	
..	..	..	..	..	..	..
69	122	..	..	69	122	..
..	..	..	..	..	..	..
69	122	..	..	69	122	..

* Cases withdrawn under the orders of the District Forest officer or Revenue Divisional officer.

Register of Breaches of Forest

District.	Cases pending from 1911-12.	New cases of the year. Injury to forest by fire.	Un-authorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	Total cases.
1	2	3	4	5	6	7	8
							CENTRAL
							Unreserved
Total for unreserved lands. A	52	..	249	..	3	252	304
B	86	1	1,402	..	29	1,432	1,518
C	..	..	147	..	..	147	..
Total ..	138	1	1,798	..	32	1,831	1,822
Total for reserved forests and unreserved lands. A	468	11	1,071	766	82	1,930	2,398
B	1,119	5	4,314	2,834	189	7,342	8,461
C	..	267	176	122	1	566	..
Grand Total ..	1,587	283	5,561	3,722	272	9,838	10,859
							SOUTHERN
							Reserved
North Vellore. A	90 (*a*) — 2	..	71	95	13	179	267
B	213 (*a*) — 110	..	663	527	3	1,193	1,296
C	..	33	..	..	..	33	..
Total ..	303 (*a*) — 112	33	734	622	16	1,405	1,563
South Vellore. A	62 (*a*) — 4 (*b*) + 53	2	143	23	17	185	296
B	252 (*a*) — 43 (*b*) — 53	..	803	272	21	1,096	1,252
C	..	24	1	..	..	25	..
Total ..	314 — 47	26	947	295	38	1,306	1,548
South Arcot .. A	240 (*a*) — 30 (*b*) — 56	..	351	148	17	516	670
B	298 (*a*) — 215 (*b*) + 56	..	663	554	5	1,222	1,361
C	..	7	22	..	..	29	..
Total ..	538 — 245	7	1,036	702	22	1,767	2,031
North Salem .. A	217	3	303	80	15	401	618
B	149	..	676	186	23	885	1,034
C	..	14	..	..	..	14	..
Total ..	366	17	979	266	38	1,300	1,652
South Salem .. A	81	..	254	30	7	291	372
B	254	.	272	164	5	441	695
C	..	48	15	..	..	63	..
Total ..	335	48	541	194	12	795	1,067

A = Cases taken into Court.
B = Cases compounded by District Forest officer or Revenue Divisional officer.
C = Cases undetected.
† In North Salem separate figures of numbers of persons have not been furnished for cases withdrawn under A and B.
(*a*) Transferred to unreserved lands.
(*b*) Transfers between A and B.

Rules during 1912–13—*cont.*

Disposed of during the year.							Cases pending at close of the year.
Convictions.		Acquittals.		Total.			
Cases.	Persons.	Cases.	Persons.	Cases.	Persons.		
9	10	11	12	13	14		15

CIRCLE—*cont*

Lands—cont.

9	10	11	12	13	14	15
163	274	53	118	216	392	88
1,250	2,354	..	..	1,250 * 116	2,354 110	152
..	..	..	..			..
1,413	2,628	53	118	1,466 * 116	2,746 110	240
1,769	4,486	300	1,197	2,069 * 7	5,683 13	322
6,653	15,833	..	..	6,653 * 589	15,833 1,323	1,219
..	..	..	..			..
8,422	20,319	300	1,197	8,722 * 596	21,516 1,336	1,541

CIRCLE.

Forests.

9	10	11	12	13	14	15
131	398	10	47	141 * 27	445 67	99
1,135	2,259	..	..	1,135 * 90	2,259 73	71
..	..	..	..	..	..	..
1,266	2,657	10	47	1,276 117	2,704 140	170
232	650	11	57	243 * 3	707 4	50
992	1,849	..	..	992 * 54	1,849 146	206
..	..	..	..	..	..	..
1,224	2,499	11	57	1,235 57	2,556 150	256
566	1,259	13	48	579 * 79	1,307 212	12
1,105	2,038	..	..	1,105 * 20	2,038 60	236
..	..	..	..	..	..	..
1,671	3,297	13	48	1,684 99	3,345 272	248
439	1,239	26	156	465 * 63	1,395 † 229	90
911	2,335	..	..	911 * 23	2,335	100
..	..	..	..	..	..	..
1,350	3,574	26	156	1,376 86	3,730 229	190
263	1,121	16	29	279	1,150	93
496	1,829	..	..	496 * 51	1,829 94	148
..	..	..	..	..	..	..
759	2,950	16	29	775 51	2,979 94	241

* Cases withdrawn under the orders of the District Forest officer or Revenue Divisional officer.

Register of Breaches of Forest

District.		Cases pending from 1911–12.	New cases of the year. Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	Total cases.
1		2	3	4	5	6	7	8
SOUTHERN								
Reserved								
Trichinopoly.	A ..	22 (b) + 19	2	28	30	5	65	106
	B ..	452 (a) −128 (b) − 19	..	558	510	6	1,074	1,379
	C ..	..	5	24	42	6	77	..
	Total	474 − 128	7	610	582	17	1,216	1,485
Madura ..	A	47	2	55	55	18	130	177
	B	352	..	583	309	62	954	1,306
	C	..	76	..	..	..	76	..
	Total ..	399	78	638	364	80	1,160	1,483
Tinnevelly ..	A	17	3	20	11	16	50	67
	B ..	245 (a) — 113	..	251	240	14	505	637
	C	..	31	12	8	2	53	..
	Total ..	262 − 113	34	283	259	32	608	704
Total for reserved forest.	A ..	776 (a) − 36 (b) + 16	12	1,225	472	108	1,817	2,573
	B ..	2,215 (a) −609 (b) − 16	..	4,469	2,762	139	7,370	8,960
	C ..	..	238	74	50	8	370	..
	Total ..	2,991 − 645 or 2,346	250	5,768	3,284	255	9,557	11,533
Unreserved								
North Vellore.	A	2	..	20	..	..	20	22
	B	110	..	465	..	3	468	578
	C	..	..	..	..	..	..	..
	Total ..	112	..	485	..	3	488	600
South Vellore.	A	4	..	3	..	2	5	9
	B ..	43 (c) − 2	1	69	..	88	158	199
	C	..		..	..	..	..	..
	Total ..	47 − 2	1	72	..	90	163	208
South Arcot ..	A ..	30 (b) + 6	..	132	..	..	132	168
	B ..	215 (b) −- 6	..	538	..	..	538	747
	C ..	..	3	39	..	..	42	..
	Total ..	245	3	709	..	..	712	915

A = Cases taken into Court.
B = Cases compounded by District Forest officer or Revenue Divisional officer.
C = Cases undetected.
(a) Transfered to unreserved lands.
(b) Transfer between A and B.
(c) Undetected cases erroneously shown as cases compounded in the previous return and now deducted.

Rules during 1912–13—*cont.*

Disposed of during the year.						Cases pending at close of the year.
Convictions.		Acquittals.		Total.		
Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
9	10	11	12	13	14	15
CIRCLE—*cont.*						
Forests—cont.						
57	168	33	105	90	273	16
1,114	2,447	..	..	1,114 * 14	2,447 49	251
..	..	..	..	..	..	..
1,171	2,615	33	105	1,204 14	2,720 49	267
131	496	25	210	156	706	21
805	2,540	..	..	805 * 98	2,540 328	403
..	..	..	..	..	..	..
936	3,036	25	210	961 98	3,246 328	424
44	182	9	35	53	217	14
562	1,554	..	..	562 * 16	1,554 33	59
..	..	..	..	..	..	..
606	1,736	9	35	615 16	1,771 33	73
1,863	5,513	143	687	2,006 * 172	6,200 512	395
7,120	16,851	..	..	7,120 * 366	16,851 783	1,474
..	..	..	..	..	..	..
8,983	22,364	143	687	9,126 * 538	23,051 1,295	1,869
Lands.						
19	33	3	7	22	40	..
402	544	..	..	402 * 14	544 23	162
..	..	..	..	..	..	..
421	577	3	7	424 14	584 23	162
7	15	2	3	9	18	..
142	238	..	..	142 * 3	238 7	54
..	..	..	..	..	..	..
149	253	2	3	151 3	256 7	54
87	127	8	9	95 * 27	136 31	46
532	756	..	..	532 * 3	756 3	212
..	..	..	..	..	..	..
619	883	8	9	627 30	892 34	258

* Cases withdrawn under the orders of the District Forest officer or Revenue Divisional officer.

Register of Breaches of Forest

District.		Cases pending from 1911-12.	New cases of the year. Injury to forest by fire.	Unauthorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	Total cases.
1		2	3	4	5	6	7	8
								SOUTHERN *Unreserved*
North Salem ..	A	..	3	30	..	..	33	33
	B	..	..	..	..	..	..	..
	C	..	..	..	..	..	..	..
	Total ..	..	3	30	..	..	33	33
South Salem ..	A	..	..	..	..	..	..	..
	B	..	..	83	..	..	83	83
	C	..	..	..	..	..	..	..
	Total ..	..	..	83	..	..	83	83
Trichinopoly.	A	..	..	15	..	..	15	15
	B ..	128 (a) − 1	..	1,149	..	2	1,151	1,278
	C	..	..	..	..	..	..	..
	Total	128 − 1	..	1,164	..	2	1,166	1,293
Madura ..	A	..	..	..	..	..	..	..
	B	..	..	..	..	..	..	..
	C	..	..	..	..	..	..	..
	Total ..	..	..	..	..	..	..	..
Tinnevelly ..	A	..	..	34	..	2	36	36
	B ..	113 (b) + 3	..	267	..	18	285	401
	C	..	..	47	..	..	47	..
	Total ..	113 + 3	..	348	..	20	368	437
Total for unreserved land.	A ..	36 (c) + 6	3	234	..	4	241	283
	B ..	609 (c) − 6	1	2,571	..	111	2,683	3,286
	C ..	..	3	86	..	..	89	..
	Total ..	645	7	2,891	..	115	3,013	3,569
Total for reserved forests and unreserved lands.	A	798	15	1,459	472	112	2 058	2,856
	B	2,193	1	7,040	2,762	250	10,053	12,246
	C	..	241	160	50	8	459	..
	Grand Total ..	2,991	257	8,659	3,284	370	12,570	15,102
								WESTERN *Reserved*
South Canara	A	(e) 44	18	63	11	15	107	151
	B	(e) 179	43	860	141	40	1,084	1,263
	C	..	130	..	..	..	130	..
	Total ..	223	191	923	152	55	1,321	1,414
Malabar, North	A	3	1	1	8	3	13	16
	C	..	1	..	..	..	1	..
	Total ..	3	2	1	8	3	14	16

A = Cases taken into Court.
B = Cases compounded by District Forest officer or Revenue Divisional officer.
C = Cases undetected.
(a) Shown in excess in the previous return.
(b) Added as per correct figures now furnished by the Collector.
(c) Transfer between A and B.
(d) Complete figures not received; hence not included.
(e) The variations between the closing balance of 1911-12 and the figures are due to transfers between heads A and B.

Rules during 1912-13—*cont.*

Disposed of during the year.						Cases pending at close of the year.
Convictions.		Acquittals.		Total.		
Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
9	10	11	12	13	14	15
CIRCLE—*cont.*						
Lands—cont.						
24	37	7	11	31	48	2
..	..	..	..	..	..	..
..	..	..	..	..	..	..
24	37	7	11	31	48	2
..	..	..	..	..	..	..
83	113	..	..	83	113	..
..	..	..	..	..	..	..
83	113	..	..	83	113	..
15	20	..	..	15	20	..
1,112	1,294	..	..	1,112	1,294	166
..	..	..	..	..	..	..
1,127	1,314	..	..	1,127	1,314	166
..	..	..	..	..	..	..
..	..	..	..	..	..	..
..	..	..	..	..	..	(*d*) ..
..	..	..	..	..	..	..
28	50	5	14	33	64	3
113	220	..	..	113 * 229	220 283	59
..	..	..	..	..	..	..
141	270	5	14	146 229	284 283	62
180	282	25	44	205 27	326 31	51
2,384	3,165	..	..	2,384 249	3,165 316	653
..	..	..	..	.	..	..
2,564	3,447	25	44	2,589 276	3,491 347	704
2,043	5,795	168	731	2,211 199	6,526 543	446
9,504	20,016	..	..	9,504 615	20,016 1,099	2,127
..	..	..	..	..	..	..
11,547	25,811	168	731	11,715 814	26,542 1,642	2,573
CIRCLE.						
Forests.						
102	222	11	35	113	257	38
922	1,786	..	..	922 * 147	1,786 * 327	194
..	..	..	..	..	..	..
1,024	2,008	11	35	1,035 * 147	2,043 * 327	232
11	14	..	..	11 * 1	14 * 1	4
..	..	..	..	..	..	..
11	14	..	..	11 * 1	14 * 1	4

* Cases withdrawn under the orders of the District Forest officer or Revenue Divisional officer.

Register of Breaches of Forest

District.		Cases pending from 1911-12.	New cases of the year.					Total cases.
			Injury to forests by fire.	Un-authorized felling or appropria-tion of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	
1		2	3	4	5	6	7	8
WESTERN								
Reserved								
Malabar, South.	A	2	..	1	3	..	4	6
	B	1	..	2	8	..	10	11
	C	..	1	..	..	..	1	..
	Total ..	3	1	3	11	..	15	17
The Nilgiris ..	A	(a) 4	3	21	7	4	35	39
	B	(a) 7	3	53	34	18	108	115
	C	..	43	1	..	..	44	..
	Total ..	11	49	75	41	22	187	154
Kollegal ..	A	(a) 40	1	39	21	10	71	111
	B	(a) 56	..	90	97	9	196	252
	C	..	18	..	..	1	19	..
	Total ..	96	19	129	118	20	286	363
Coimbatore, North.	A	(a) 33	1	103	49	10	163	196
	B	(a) 27	1	172	180	30	383	410
	C	..	42	4	..	1	47	..
	Total ..	60	44	279	229	41	593	606
Coimbatore, Central.	A	16	5	58	22	10	95	111
	B	37	2	210	125	50	387	424
	C	..	24	..	..	..	24	..
	Total ..	53	31	268	147	60	506	535
Coimbatore, South.	A	8	..	63	38	21	122	130
	B	7	..	41	37	14	92	99
	C	..	41	8	1	..	50	..
	Total ..	15	41	112	76	35	264	229
Total for reserved forests.	A	150	29	349	159	73	610	760
	B	314	49	1,428	622	161	2,260	2,574
	C	..	300	13	1	2	316	..
	Total ..	464	378	1,790	782	236	3,186	3,334
Unreserved								
South Canara ..	A	(a) 10	..	33	..	2	35	45
	B	(a) 45	..	115	..	12	127	172
	Total ..	55	..	148	..	14	162	217

A = Cases taken into Court.
B = Cases compounded by District Forest Officer or Revenue Divisional officer.
C = Cases undetected.
(a) The variations between the closing balance of 1911-12 and these figures are due to transfers between heads A and B.
(b) Omitted to be shown in the last year's return by the Collector.

Rules during 1912-13—*cont.*

Disposed of during the year.						Cases pending at close of the year.
Convictions.		Acquittals.		Total.		
Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
9	10	11	12	13	14	15
CIRCLE—*cont.*						
Forests—cont.						
5	7	..	..	5 * 1	7 * 1	..
10	19	..	..	10	19	1
..	..	..	..	..	..	..
15	26	..	..	15 * 1	26 * 1	1
28	74	1	1	29	75	10
106	365	..	..	106	365	9
..	..	..	..	..	..	..
134	439	1	1	135	440	19
70	226	19	80	89 * 1	306 * 2	21
193	461	..	..	193 * 29	461 * 111	30
..	..	..	..	..	..	..
263	687	19	80	282 * 30	767 * 113	51
156	571	6	29	162	600	34
291	779	..	..	291 * 40	779 * 125	79
..	..	..	..	..	..	..
447	1,350	6	29	453 * 40	1,379 * 125	113
100	346	3	18	103	364	8
331	933	..	..	331 * 22	933 * 78	71
..	..	..	..	..	..	..
431	1,279	3	18	434 * 22	1,297 * 78	79
121	260	2	4	123	264	7
79	220	..	..	79 * 6	220 * 14	14
..	..	..	..	..	..	..
200	480	2	4	202 * 6	484 * 14	21
593	1,720	42	167	635 * 3	1,887 * 2	122
1,932	4,563	..	..	1,932 * 244	4,563 * 655	398
..	..	..	..	..	..	..
2,525	6,283	42	167	2,567 * 247	6,450 * 657	520
Lands.						
31	56	6	10	37	66	8
121	138	..	..	121 * 15	138 * 38	36
152	194	6	10	158 * 15	204 * 38	44

* Withdrawn under the orders of the District Forest Officer or Revenue Divisional officer.

Register of Breaches of Forest

District.		Cases pending from 1911–12.	New cases of the year.					Total cases.
			Injury to forests by fire.	Un-authorized felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.	
1		2	3	4	5	6	7	8

WESTERN

Unreserved

District		Cases pending from 1911–12	Injury to forests by fire	Un-authorized felling	Grazing	Other offences	Total new cases	Total cases
Malabar, North	B	..	..	3	..	..	3	3
Malabar, South	A	..	1	..	..	1	2	2
	B	3	..	2	..	..	2	5
	C	..	..	..	..	1	1	..
	Total ..	3	1	2	..	2	5	7
Kollegal ..	A	(a) 1	1	..	..	..	1	2
	B	(a) 5	2	15	..	..	17	22
	Total ..	6	3	15	..	..	18	24
Coimbatore, North.	A	..	..	9	..	..	9	9
	B	..	..	144	..	..	144	144
	C	..	1	1	..	..	2	..
	Total ..	..	1	154	..	..	155	153
Coimbatore, Central.	A	3	..	27	..	1	28	31
	B	(b) 8	..	170	..	..	170	178
	C	..	..	3	..	..	3	..
	Total ..	11	..	200	..	1	201	209
Coimbatore, South.	A	..	..	7	..	..	7	7
	B	..	..	65	..	..	65	65
	C	..	..	3	..	..	3	..
	Total ..	..	..	75	..	..	75	72
Total for unreserved lands.	A	14	2	76	..	4	82	96
	B	61	2	514	..	12	528	589
	C	..	1	7	..	1	9	..
	Total ..	75	5	597	..	17	619	685
Total for reserved forests and unreserved lands.	A	164	31	425	159	77	692	856
	B	375	51	1,942	622	173	2,788	3,163
	C	..	301	20	1	3	325	..
	Grand Total ..	539	383	2,387	782	253	3,805	4,019
Total, Presidency.	A	1,751	65	3,526	1,583	321	5,495	7,246
	B	4,182	63	15,104	6,829	734	22,730	26,912
	C	..	949	524	179	15	1,667	..
Grand Total, Presidency. ..		5,933	1,077	19,154	8,591	1,070	29,892	34,158

A = Cases taken into Court.
B = Cases compounded by District Forest officer or Revenue Divisional officer.
C = Cases undetected.
(a) The variations between the closing balance of 1911–12 and these figures are due to transfers between heads A and B.
(b) Omitted to be shown in the last year's return by the Collector.

Rules during 1912–13—*cont.*

Disposed of during the year.						Cases pending at close of the year.
Convictions.		Acquittals.		Total.		
Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
9	10	11	12	13	14	15
CIRCLE—*cont.*						
Lands—cont.						
3	3	..	..	3	3	..
..	..	1	2	1 * 1	2 * 1	..
5	11	..	..	5	11	..
..	..	..	..	..	..	..
5	11	1	2	6 * 1	13 * 1	..
1	1	..	..	1	1	1
17	24	..	..	17	24	5
18	25	..	..	18	25	6
6	17	2	8	8	25	1
143	312	..	..	143	312	1
..	..	..	..	..	..	..
149	329	2	8	151	337	2
25	49	4	10	29	59	2
166	285	..	..	166 * 5	285 * 15	7
..	..	..	..	..	..	..
191	334	4	10	195 * 5	344 * 15	9
7	17	..	.	7	17	..
64	84	..	..	64 * 1	84 * 1	..
..	..	..	..	..	..	..
71	101	..	..	71 * 1	101 * 1	..
70	140	13	30	83 * 1	170 * 1	12
519	857	..	..	519 * 21	857 * 54	49
..	..	..	..	..	..	..
589	997	13	30	602 * 22	1,027 * 55	61
663	1,860	55	197	718 * 4	2,057 * 3	134
2,451	5,420	..	..	2,451 * 265	5,420 * 709	447
..	..	..	..	..	..	..
3,114	7,280	55	197	3,169 * 269	7,477 * 712	581
5,352	14,571	616	2,490	5,968 * 213	17,061 * 564	1,065
20,910	47,103	1	4	20,911 * 1,786	47,107 * 4,171	4,215
..	..	..	..	..	..	..
26,262	61,674	617	2,494	26,879 * 1,999	64,168 * 4,735	5,280

* Withdrawn under the orders of the District Forest Officer or Revenue Divisional officer.

APPENDIX to Annual Form No. 71 (Statement No. II prescribed by the Government of India).

District.	Details of prosecution for offences by fire.						
	Serial number.	Area burnt in acres.	Character of offence (whether intentional or careless).	Whether acquitted or convicted.	Section of law under which convicted.	Amount of punishment.	Remarks.
			NORTHERN CIRCLE.				
Ganjām	* 1	50	Careless	Withdrawn.	....	....	
	* 2	50	Do.	Do.	....	....	....
	* 3	10	Do.	Do.	....	....	....
	* 4	2	Do.	Do.	....	....	....
	5	10	Intentional.	Pending	....	....	....
	6	50	Do.	Withdrawn.	....	....	....
	7	45	Do.	Pending	....	....	....
Vizagapatam.	1	..	Careless	Convicted	21 (c) of Madras Forest Act.	Sentenced to undergo one week's rigorous imprisonment for kindling fire in Burna reserve. No damages was done.	....
Gōdāvari, Upper.	1	5	Careless	Withdrawn.	....	....	....
	2	3,200	Intentional.	Pending	....	....	Under trial by the Magistrate.
Gōdāvari, Lower.	* 1	..	Intentional.	Acquitted	Section 21 of the Forest Act.	....	...
	2	..	..	Pending	....	....	Pending with the Sub-Magistrate, Pratbipad.
	3	..	..	Convicted	....	Sentenced to pay a fine of Rs. 5 each, the accused being three in number.	....
Kurnool, East.	1	7	Careless	Pending	....	....	....
Kurnool, South.	* 1	A few square yards.	Careless	Convicted	....	The two accused were sentenced to pay a fine of Rs. 8 each in default to suffer rigorous imprisonment for a week. They are further ordered to pay a compensation of Rs. 2 each to the Forest department.	The case has since been disposed of with the result that two accused out of three were acquitted and the third was fined Rs. 10.
Kurnool, West.	1	..	Intentional.	Pending	....	....	....
	1	..	Careless	Withdrawn.	....	....	....
			CENTRAL CIRCLE.				
Bellary	* 1	100	Intentional.	Acquitted	Section 21 (b) of the Forest Act.	....	
	2	1 sq. chain.	Careless	Do.	Do.	....	
	3	9 acres	Intentional.	Compounded.	Do.	Compounded for Rs. 5.	
	4	70 acres	Do.	Pending	....	....	
Guntūr	* 1	4 sq. yds.	Careless	Convicted	Section 21 (b) of the Forest Act.	One accused sentenced to undergo simple imprisonment for 7 days and the other was fined Rs. 5 with the option of 10 days' simple imprisonment.	
	* 2	15 sq. yds	Intentional.	Do.	Do.	Fined Rs. 3 with the option of 6 days' simple imprisonment.	One case in unreserved land not reported.
Cuddapah, North.	1	1,570	Do.	Pending	....	....	
	2	25	Do.	Withdrawn.	....	....	
	3	580	Do.	Pending	....	....	
Cuddapah, East.	1	50	Do.	Convicted	Section 21 (b) of the Forest Act.	Three months' rigorous imprisonment.	
	2	560	Do.	Pending	....	....	
	3	½ chain	Do.	Convicted	Section 21 (b) of the Forest Act.	Fined Rs. 20 and in default to undergo 15 days' rigorous imprisonment.	
	4	(a)	Do	Do.	Do.	Nos. 1 and 2 to two months' rigorous imprisonment and No. 3 to one month's rigorous imprisonment.	(a) Offences of merely kindling fire and no areas have been burnt.
	5	800	Do.	Pending	....	....	
	6	(a)	Do.	Do.	....	....	
		400	Do.	Withdrawn.	....	....	
Nellore	7	½ cent.	Careless	Compounded.	Sections 21 and 55 of Forest Act.	Compounded for Rs. 5.	
	12	1·80 sq. ft.	Do.	Pending	....	....	

* Pending cases of previous year.

Appendix to Annual Form No. 71 (Statement No. II prescribed by the Government of India)—*cont.*

District.	Details of punishment for offences by fire during 1912-13.						
	Serial number.	Area burnt in acres.	Character of offence whether intentional or careless.	Whether acquitted or convicted.	Section of law under which convicted.	Amount of punishment.	Remarks.
			Southern Circle.				
North Vellore.	1	2 cents ..	Careless ..	Convicted ..	Section 21 of the Forest Act.	Compounded for Rs. 18.	
	2	40 acres ..	Do. ..	Acquitted ..	Acquitted.	....	
South Vellore.	1	About 27 acres.	Intentional.	Convicted .	Section 21 (c) of the Forest Act.	Rigorous imprisonment for one month.	
	2	18 acres ..	Do.	Acquitted ..	....	....	
	3	15 „ ..	Do.	Convicted ..	Section 21 (c) of the Forest Act.	Rigorous imprisonment for 15 days.	
	4	30 „ ..	Do.	Pending ..	....	....	
	5	*Nil.*	Careless	Do. ..	....	....	
South Arcot.	*Nil.*						
North Salem.	1	1 foot square.	Careless ..	Acquitted ..	....	....	
	2	100 acres ..	Do ..	Convicted ..	Under section 21 (b) of the Forest Act.	Rupees 80.	
	3	794 „ ..	Intentional.	Acquitted ..	....	....	
	4	Mere attempt.	Do.	Convicted ..	Under section 21 (b) of the Forest Act.	Rupees 3.	
	5	30 acres.	Do.	Pending ..	....	....	
	6	2 „	Do.	Acquitted ..	....	....	
South Salem.	1	3 „	Do.	Convicted ..	Section 21 (b) of the Forest Act.	Fine of Rs. 5 in default rigorous imprisonment for one week.	
	2	50 acres.	Do.	Do. ..	Do.	Fine of Rs. 50 in default rigorous imprisonment for $1\frac{1}{2}$ months.	
Trichinopoly.	1	25′ × 4′	Careless.	Pending ..	....	....	
	2	20 acres more or less.	Do. ..	Acquitted ..	....	....	
Madura ..	1	40 acres.	Intentional.	Convicted ..	Section 21 (b) of the Forest Act.	Accused fined Rs. 15 each.	
	2	50 „	Do.	Do. ..	Do.	Accused was fined Rs. 35.	
	3	60 „	Do.	Pending ..	....	....	
	4	200 acres.	Intentional in certain game.	Do. ..	....	....	
Tinnevelly *cum* Ramnad.	1	*Nil.*	Careless ..	Convicted ..	Section 21 (b) of the Forest Act.	Rupees 10.	
	2	1,500 acres.	Intentional.	Do. one and the other acquitted.	Do.	Rupees 10.	
	3	3,000 „	Do.	Withdrawn.	....	....	Prosecution was not considered justifiable.
			Western Circle.				
South Canara.	* 1	..	Careless.	Compounded for Rs. 5.	...	....	The South Canara compounding fees were very light.
	* 2	30 ..	Do.	Compounded for Rs. 6.	....	....	
	* 3	30 ..	Do.	Convicted ..	Section 21 (b) of the Madras Forest Act.	Fined Rs. 15.	
	* 4	10 ..	Do.	Do. ..	Do.	„ Rs. 20.	
	* 5	..	Do.	Do. ..	Do.	„ Rs. 2.	
	* 6	..	Do.	Do. ..	Do.	„ Rs. 5.	
	* 7	40 ..	Do.	Do. ..	Do.	„ Rs. 75.	
	* 8	..	Do.	Do. ..	Do.	„ Rs. 100.	
	9	..	Do.	Compounded for Re. 1.	....	....	
	10	1 ..	Do.	Compounded for Rs. 2.	....	....	
	11	1·5 ..	Intentional.	Compounded for Rs. 3.	....	....	
	12	5 ..	Do.	Compounded for Rs. 27.	....	....	
	13	4 ..	Do.	Compounded for Rs. 3.	....	....	
	14	1 ..	Careless.	Compounded for Rs. 5.	....	....	
	15	..	Do.	Compounded for As 12.	....	..	
	16	..	Do.	Compounded for As. 4.	....	....	

N.B.—Southern Circle Details for unreserved land cases in South Vellore and in North Salem have not been furnished.
* Pending cases of previous year.

Appendix to Annual Form No. 71 (Statement No. II prescribed by the Government of India)—*cont.*

District.	Details of prosecutions for offences by fire.						
	Serial number.	Area burnt in acres.	Character of offences (whether intentional) or careless.	Whether acquitted or convicted.	Section of law under which convicted.	Amount of punishment.	Remarks.
			Western Circle—cont.				
South Canara—*cont.*	17	·25 ..	Careless.	Compounded for As. 8.	....	....	
	18	2 ..	Do.	Convicted ..	Section 21 (*b*) of the Madras Forest Act.	Fined Rs. 5.	
	19	2 ..	Do.	Compounded for Rs. 2.	....	....	
	20	10 ..	Do.	Convicted ..	Section 21 (*b*) of the Madras Forest Act.	Fined Rs. 35.	
	21	15 ..	Do.	Do. ..	Do.	,, Rs. 15.	
	22	60 ..	Do.	Do. ..	Do.	,, Rs. 15.	
	23	75 ..	Intentional.	Do. ..	Do.	,, Rs. 40.	
	24	15 ..	Careless.	Compounded for Rs. 10.	....	....	
	25	6 ..	Do.	Compounded for Rs. 5.	....	....	
	26	..	Do.	Convicted ..	Section 21 (*b*) of the Madras Forest Act.	Fined Rs. 6.	
	27	..	Do.	Do. ..	Do.	,, Rs. 2.	
	28	40 ..	Do.	Compounded for Rs. 15.	....	....	
	29	3 ..	Do.	Compounded for Rs. 8.	....	....	
	30	5 ..	Do.	Compounded for Rs. 5.	....	....	
	* 31 to 33	804 ..	Intentional.	Acquitted ..	....	....	
	* 34	25 ..	Careless.	Do ..	....	....	
	† 35 to 54	1,209 ..	Do.	Withdrawn.	....	....	
	‡ 55 to 58	112 ..	Intentional.	Do. ..	....	....	
	59 to 73	2,616 ..	Careless.	Pending ..	....	....	
	74 to 78	825 ..	Intentional.	Do. ..	....	....	
Malabar, North.	1	..	Do.	Convicted ..	Section 21 (*b*) of the Madras Forest Act.	Fined Rs. 5.	
Malabar, South.	§ 1	6 ..	Do.	Withdrawn.	....	....	
The Nilgiris.	1	400 ..	Intentional.	Withdrawn.	...	....	
	2 and 3	30 ..	Careless.	Do.	...	...	
	4	50 ..	Do.	Convicted ..	Section 21 (*b*) of the Madras Forest Act.	Sentenced to suffer rigorous imprisonment for one month.	
	5	·5 ..	Do.	Do. ..	Do.	Do.	
	6	2 ..	Intentional.	Do. ..	Do.	Sentenced to suffer rigorous imprisonment for 16 days and to pay a fine of Rs. 25; Rs. 17-4-0 to be paid as compensation to the Forest Department.	
Kollegal ..	* 1	160 ..	Do.	Do. ..	Section 21 (*b*) of the Madras Forest Act.	Sentenced to suffer rigorous imprisonment for one month.	
	* 2	1,000 ..	Do.	Do. ..	Do.	Do.	
	* 3	10 ..	Do.	Acquitted ..	....	....	
	4	..	Careless.	Pending ..	...	....	
	§ 5	Setting fire to a classified tree.	Intentional.	Compounded for Rs. 10.	....	....	
	§ 6	Setting fire to a tamarind tree.	Do.	Compounded for Rs. 20.	....	....	
	§ 7	Setting fire to a first class tree.	Do.	Pending ..	....	....	
Coimbatore, North.	1	..	Do.	Do. ..	....	....	
	2	..	Do.	Withdrawn.	...	....	

* Pending cases of previous year.
† Includes four pending cases of last year.
‡ Includes one pending case of last year.
§ Cases relating to unreserved lands.

Appendix to Annual Form No. 71 (Statement No. II prescribed by the Government of India)—*cont.*

District.	Details of prosecutions for offences by fire.						
	Serial number.	Area burnt in acres.	Character of offences (whether intentional) or careless.	Whether acquitted or convicted.	Section of law under which convicted.	Amount of punishment.	Remarks.
			Western Circle—cont.				
Coimbatore, Central.	* 1	·75 ..	Intentional.	Acquitted ..		....	
	2	·10 ..	Do.	Convicted ..	Section 21 (*b*) of the Madras Forest Act.	Two accused; fined Rs. 35 each in default to undergo rigorous imprisonment for one month each.	
	3	4 ..	Do.	Do. ..	Do.	Three accused; fined Rs. 10 each in default to undergo rigorous imprisonment for 10 days each.	
	4	..	Do.	Compounded for Rs. 40.	....	....	
	5	150 ..	Careless.	Acquitted ..	....	....	
	6	100 ..	Do.	Pending ..	....	....	
	7 and 8	125 ..	Intentional.		....	....	

* Pending cases of previous year.

Annual Form No. 72.

Forest Department, Madras Presidency.

Area of Forest Tracts protected from Fire during 1912–13.

District.	Forest tracts.	Area protected during the previous year.	During the year under report. Area attempted to be protected.	Fires.	Actually protected.	Cost during the year under report.	Remarks.
1	2	3	4	5	6	7	8
	Northern Circle.	ACS.	ACS.	ACS.	ACS.	RS.	
Ganjām	Special protection ..	* 103,093	111,149	700	110,449	3,687	* The difference between these and the figures in the report for 1911–12 is due to the adoption of correct figures during 1912–13.
	General do. ..	* 64,410	38,538	3,723	34,815	426	
	Total, Ganjám ..	167,503	(*b*)149,687	(*c*) ,423	(*d*)145,264	(*e*) 4,113 +346	Adjusted as per Accountant-General's figures.
Vizagapatam.	Special protection ..	† 57,467	67,480	3,035	64,445	2,243	† The increase of 155 acres in column 4 is due to the adoption of correct figures.
	General do. ..	49,924	124,178	16,089	108,089	222	
	Total, Vizagapatam ..	107,391	191,658	19,124	172,534	2,465 – 64	Adjusted as per Accountant-General's figures.
Gōdāvari, Upper.	Special protection ..	489,275	542,636	119,005	423,631	5,215	
	General do. ..	..	..	..	..	..	
	Total, Gōdāvari, Upper ..	489,275	542,636	119,005	423,631	5,215	
Gōdāvari, Lower.	Special protection ..	.	..	..	..		
	General do. ..	215,843	229,735	19,606	210,129	6,101	
	Total, Gōdāvari, Lower ..	215,843	229,735	19,606	210,129	6,101	
Kistna	Special protection ..	44,657	47,092	368	46,724	1,796	
	General do. ..	..	.	.		..	
	Total, Kistna ..	44,657	47,092	368	46,724	1,796	
Kurnool, East.	Special protection ..	16,567	34,994	5,145	29,849	5,427	
	General do. ..	585,914	605,445	97,986	507,459	..	
	Total, Kurnool, East ..	602,481	640,439	103,131	537,308	5,427	
Kurnool, South.	Special protection ..	76,452	226,395	57,686	168,709	21,513	
	General do. ..	290,064	271,269	20,231	251,038	..	
	Total, Kurnool, South ..	366,516	497,664	77,917	419,747	21,513	
Kurnool, West.	Special protection ..	112,079	158,914	58,555	100,359	10,583	
	General do. ..	226,123	408,584	67,601	340,983	139	
	Total, Kurnool, West ..	338,202	567,498	126,156	441,342	10,722 – 73	Adjusted as per Accountant-General's figures.
	Total, Special ..	899,590	1,188,660	244,494	944,166	52,891	
	Total, General ..	1,432,278	1,677,749	225,236	1,452,513	6,888	
	Grand total ..	2,331,868	2,866,409	469,730	2,396,679	57,352 + 209 57,561	Adjusted as per Accounatnt-General's figures.
	Central Circle.						
Bellary	Special protection ..	‡ 60,637	77,580	15,290	62,290	6,199	‡ Revised figure furnished by the Collector.
	General do. ..	‡ 400	400	..	400	(*a*)+1,167 ..	
	Total ..	61,037	77,980	15,290	62,690	7,366	

(*a*) Added or deducted as per Accountant-General's audited figures.
(*b*) Excludes 28,585 acres belonging to the Parlakimedi Maliahs.
(*c*) Excludes 3 acres do.
(*d*) Excludes 28,582 acres do.
(*e*) Excludes Rs. 66–4–0 incurred in Parlākimedi Maliahs.

Area of Forest Tracts protected from Fire during 1912–13—*cont.*

District.	Forest tracts.	Area protected during the previous year.	During the year under report: Area attempted to be protected.	Fires.	Actually protected.	Cost during the year under report.	Remarks.
1	2	3	4	5	6	7	8
	Central Circle—cont.	ACS.	ACS.	ACS.	ACS.	RS	
Anantapur ..	Special protection ..	333,127	364,065	42,104	321,961	6,033	
	General do. ..	..	..	..	..	..	
	Total ..	333,127	364,065	42,104	321,961	6,033	
Guntūr ..	Special protection ..	13,186	13,334	1,259	12,075	105 (a) + 81	
	General do. ..	21,078	21,203	101	21,102	169	
	Total ..	34,264	34,537	1,360	33,177	355	
Cuddapah, North.	Special protection ..	*217,969	254,939	14,546	240,393	4,658 (a) — 6	* Revised figure furnished by the Collector.
	General do. ..	*102,881	76,909	1,816	75,093	708	
	Total ..	320,850	331,848	16,362	315,486	5,360	
Cuddapah, East.	Special protection ..	*209,154	212,895	1,214	211,681	3,376 (a) + 487	
	General do. ..	151,454	224,317	19,266	205,051	1,361	
	Total ..	360,608	437,212	20,480	416,732	5,224	
Nellore ..	Special protection ..	*149,690	138,790	2,518	136,272	1,356 (a) + 1	
	General do. ..	..	..	..	..	..	
	Total ..	149,690	138,790	2,518	136,272	1,357	
Chingleput..	Special protection ..	25,846	25,857	†	25,857	907	† Less than one acre.
	General do. ..	*108,126	108,126	..	108,126	..	
	Total ..	133,972	133,983	..	133,983	907	
Chittoor ..	Special protection ..	124,361	133,868	928	132,940	1,486	
	General do. ..	342,482	353,952	1,562	352,390	..	
	Total ..	466,843	487,820	2,490	485,330	1,486	
Total..	Special protection ..	1,133,970	1,221,328	77,859	1,143,469	24,120 (a)+1,730	
	General do. ..	726,421	784,907	22,745	762,162	2,238	
	Grand Total ..	1,860,391	2,006,235	100,604	1,905,631	28,088	
	Southern Circle.						
Vellore, North.	Special protection ..	91,578	98,830	869	97,961	617	
	General do. ..	235,940	209,018	1,268	207,750	.	
	Total ..	327,518	307,848	2,137	305,711	617	
Vellore, South.	Special protection ..	117,633	118,661	328	118,333	3,155	
	General do. ..	314,798	318,431	785	317,646	..	
	Total ..	432,431	437,092	1,113	435,979	3,155	
South Arcot.	Special protection ..	13,768	13,768	50	13,718	316	
	General do. ..	199,009	207,358	51	207,307	..	
	Total ..	212,777	221,126	101	221,025	316	
Salem, North	Special protection ..	12,901	53,719	425	53,294	2,194 (for both)	
	General do. ..	520,018	482,945	1,828	481,117		
	Total ..	532,919	536,664	2,253	534,411	2,194	

(a) Added or deducted as per Accountant-General's audited figures.

Area of Forest Tracts protected from Fire during 1912-13—*cont.*

District	Forest tracts.	Area protected during the previous year.	During the year under report. Area attempted to be protected.	Fires.	Actually protected.	Cost during the year under report.	Remarks.
1	2	3	4	5	6	7	8
	Southern Circle—cont.	ACS.	ACS.	ACS.	ACS.	RS.	
Salem, South	Special protection ..	228,930	229,700	938	228,762	3,316	
	General do. ..	140,647	142,062	559	141,503	..	
	Total ..	369,577	371,762	1,497	370,265	3,316	
Trichinopoly	Special protection ..	..	22,199	..	22,199	291	
	General do. ..	58,660	74,932	238	74,694	280	
	Total ..	58,660	97,131	238	96,893	571	
Madura ..	Special protection ..	143,244	162,911	4,316	158,595	3,117	
	General do. ..	275,211	263,591	6,894	256,697	..	
	Total ..	418,455	426,502	11,210	415,292	3,117	
Tinnevelly *cum* Rāmnād.	Special protection ..	31,485	35,377	1,273	34,104	2,708	
	General do. ..	204,581	206,712	10,717	195,995	..	
	Total ..	236,066	242,089	11,990	230,099	2,708	
	Total, Special protection.	639,539	735,165	8,199	726,966	15,714	
	Total, General protection.	1,948,864	1,905,049	22,340	1,882,709	280	
	Grand total (Special and General).	2,588,403	2,640,214	30,539	2,609,675	15,994	
	Western Circle.						
South Canara.	Special protection ..	128,526	132,622	4,764	127,858	2,535 *+1,071	RS. *Fire-tracing cart tracks and cart stands. 13 Fire-tracing Mysore-South Canara boundary. 668 Cost of reclearing unprotected length in Coondapur range. 287 Cost of previous year disbursed during the year. 103 Total .. 1,071
	General do. ..	374,068	377,935	3,712	374,223	822	
	Total ..	502,594	510,557	8,476	502,081	4,428	
Malabar, North.	Special protection ..	124,916	139,100	2,511	136,589	7,049	
	General do. ..	..	..	..	..	..	
	Total ..	124,916	139,100	2,511	136,589	7,049	
Malabar, South.	Special protection ..	80,720	80,907	118	80,789	2,457 + 10	Cost of clearing fire lines round the buildings in Palghat.
	General do. ..	..	..	..	..	..	
	Total ..	80,720	80,907	118	80,789	2,467	
The Nilgiris.	Special protection ..	80,748	78,051	5,850	72,201	3,860	
	General do. ..	..	..	..	..	..	
	Total ..	80,748	78,051	5,850	72,201	3,860	
Kollegal ..	Special protection ..	64,314	66,757	60	66,697	1,524	
	General do. ..	340,730	400,450	12,405	388,045	1,178	
	Total ..	405,044	467,207	12,465	454,742	2,702	

Area of Forest Tracts protected from Fire during 1912-13—*cont*

District.	Forest tracts	Area protected during the previous year.	During the year under report. Area attempted to be protected.	Fires.	Actually protected.	Cost during the year under report.	Remarks.
1	2	3	4	5	6	7	8
	Western Circle—cont.	ACS.	ACS.	ACS.	ACS.	RS.	
Coimbatore, North.	Special protection ..	29,867	70,574	1,927	68,647	3,010	
	General do. ..	452,969	518,635	3,319	515,316	..	
	Total ..	482,836	589,209	5,246	583,963	3,010	
Coimbatore, Central.	Special protection ..	67,712	104,627	2,150	102,477	3,289	
	General do. ..	121,197	121,197	82	121,115	..	
	Total ..	188,909	225,824	2,232	223,592	3,289	
Coimbatore, South.	Special protection ..	33,463	45,737	778	44,959	2,607	
	General do. ..	191,667	182,516	2,741	179,775	..	
	Total ..	225,130	228,253	3,519	224,734	2,607	
	Total, Special protection.	610,266	718,375	18,158	700,217	26,331 +1,081	
	Total, General protection.	1,480,631	1,600,733	22,259	1,578,474	2,000	
	Grand total ..	20,90,897	2,319,108	40,417	2,278,691	29,412	
Total Pre sidency.	Special protection ..	3,283,365	3,863,528	348,710	3,514,818	121,867	
	General do. ..	5,588,194	5,968,438	292,580	5,675,858	11,406	
	Grand total, Presidency.	8,871,559	9,831,966	641,290	9,190,676	133,273	

Annual Form No. 73.

Forest Department, Madras Presidency.

Area closed and open to grazing during 1912–13.

District.	Area in square miles.						
	Closed to all animals.		Closed to both goats and sheep.		Area closed to goats only.	Open to all animals.	Total forest area as per Form No. 65.
	Whole year.	Part of year.	Whole year.	Part of year.		Whole year.	
1	2	3	4	5	6	7	8
	SQ. MLS.	SQ. MLS.	SQ. MLS.		SQ. MLS.	SQ. MLS.	SQ. MLS.
Northern Circle.							
Ganjām	76	..	..	..	(*b*) 488	(*c*) ..	564
	..	..	..	..	..	75	75
Vizagapatam ..	14	..	2	..	287	..	303
	..	..	..	..	10	..	10
Gōdāvari, Upper ..	1	..	..	..	427	..	428
	..	..	..	..	..	..	99
Do. Lower ..	14	..	..	..	390	..	404
	75	..	..	..	..	..	75
Kistna	36	8	..	..	158	76	278
	..	..	..	..	..	4	4
Kurnool, East	55	..	..	..	946	..	1,001
Do. South	392	..	..	..	386	..	778
Do. West	235	10	..	..	613	..	858
Total ..	823	18	2	..	3,695	76	4,614
	75	..	..	..	10	79	263
Central Circle.							
Reserved Forest.							
Bellary	142	..	..	..	383	101	626
Anantapur	146	4	..	..	593	..	743
Guntūr	81	..	..	..	613	120	814
Cuddapah, North	60	81	..	..	573	20	734
Do. East	171	51	..	..	843	18	1,083
Nellore	41	..	69	..	566	69	745
Chingleput	34	..	..	..	173	2	209
Chittoor	136	29	..	..	672	3	840
Total ..	811	165	69	..	4,416	333	5,794
Reserved Lands.							
Bellary	32	..	..	..	..	32	64
Anantapur	..	..	..	..	..	11	1
Guntūr	..	..	..	..	..	..	..
Cuddapah, North	..	..	..	..	..	..	..
Do. East	..	..	..	..	..	..	..
Nellore	..	..	..	..	..	..	..
Chingleput	..	..	..	..	..	..	..
Chittoor	..	..	..	..	..	..	..
Total ..	32	..	..	..	..	43	75
Grand total ..	843	165	69	..	4,416	376	5,869
Southern Circle.							
Reserved Forests.							
North Vellore	69	..	..	..	404	26	499
South do.	44	..	..	..	701	..	745
South Arcot	31	..	..	..	314	..	345
North Salem	106	..	..	..	649	37	792
South do.	62	4	..	..	515	..	581
Trichinopoly	49	..	3	..	304	..	356
Madura	113	..	..	..	485	68	666
Tinnevelly *cum* Rāmnād ..	208	43	4	..	174	..	429
Total ..	682	47	7	..	3,546	131	4,413
Reserved Land.							
North Vellore	..	..	..	..	(*a*)	..	..
North Salem	..	..	..	..	25	21	46
South do.	..	..	..	..	6	..	6
Trichinopoly	..	..	..	..	3	..	3
Madura	..	..	..	..	(*a*)	..	..
Tinnevelly	..	..	..	..	(*a*)	..	..
Total ..	..	..	..	.	34	21	55

Note.—(*Northern Circle*). Of the figures in brackets the upper ones denote the area of reserved forests, and the lower ones the area of reserved lands.

(*a*) Area omitted being less than a square mile.
(*b*) Excludes 57 square miles belonging to the Parlakimedi Maliahs.
(*c*) Do. 24 do. do.

Area closed and open to grazing during 1912–13—*cont.*

District.	Area in square miles.						
	Closed to all animals.		Closed to both goats and sheep.		Area closed to goats only.	Open to all animals.	Total forest area as per Form No. 65.
	Whole year.	Part of year.	Whole year.	Part of year.		Whole year.	
1	2	3	4	5	6	7	8
WESTERN CIRCLE.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.	SQ. MLS.
South Canara .. .. — *Reserved forests.*	7	..	..	..	791	..	798
Reserved lands.	.	..	..	..	*	..	*
Total ..	7	..	..	..	791	..	798
Malabar, North .. — *Reserved forests.*	30	..	231	..	..	..	261
Reserved lands.	..	..	1	..	..	..	1
Total ..	30	..	232	..	..	..	262
Malabar, South .. — *Reserved forests.*	108	..	..	..	..	..	108
Reserved lands.	55	..	..	..	..	..	55
Total ..	163	..	..	..	..	..	163
The Nilgiris .. .. — *Reserved forests.*	23	..	..	..	455	..	478
Reserved lands.	4	..	..	..	78	..	82
Total ..	27	..	..	..	533	..	560
Kollegal .. .. .. — *Reserved forests.*	109	..	..	..	338	..	447
Reserved lands.	54	..	..	..	229	..	283
Total ..	163	..	..	..	567	..	730
Coimbatore, North .. — *Reserved forests.*	99	30	..	..	792	..	921
Reserved lands.	..	..	..	..	1	..	1
Total ..	99	30	..	..	793	..	922
Coimbatore, Central .. — *Reserved forests.*	153	9	..	..	191	..	353
Reserved lands.	10	..	..	..	..	..	10
Total ..	163	9	..	..	191	..	363
Coimbatore, South .. — *Reserved forests.*	88	11	179	..	176	..	454
Reserved lands.	*	..	..	..	..	..	*
Total ..	88	11	179	..	176	..	454
Total Reserved forest. — *Reserved forests.*	617	50	410	..	2,743	..	3,820
Total Do. lands. — *Reserved lands.*	123	..	1	..	308	..	432
Grand total ..	740	50	411		3,051	..	4,252
Grand total, Presidency ..	3163	280	489	..	14,752	683	19,466

* Less than one square mile.

ANNUAL

Forest Department,

FORM No. 74.

Madras Presidency.

RETURN of Grazing in the State forests during 1912-13.

Districts.	Grazing on payment. Number of animals. At enhanced or special rates. Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.	At full rates. Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.
1	2	3	4	5	6	7	8	9	10	11
NORTHERN CIRCLE.					RS.					RS.
Ganjām	..	..	..	..	..	(s) 11,703	(t)37,407	S 100	..	(u) 11,412
Vizagapatam	(a) 168	(a) 2,959	(a) S 3,372	..	1,245	1,219	17,871	S 3,230	..	4,111
Gōdāvari, Upper	..	..	..	..	..	..	..	..	..	..
Do. Lower	(a) 8,756 (d) 1,209	(a) 11,879 (d) 585	.. ..	.. ..	8,474	943	11,046	S 184	.. Fodder grass and lease of grass.	1,634 843
Kistna	(d) 976 (g) 468	(d) 7,300 (g) 3,513	(d) S 2,961 (g) G 7,984	.. ..	10,002	6,883	35,527	S 20,696	..	11,183
Kurnool, East	(a) 5,554	(a) 81,583 X 95	(a) S 32,631	..	27,263	1,848	6,902	S 26,683	.. Fodder grass 199 C.L.	4,489 155
Do. South	(a) 597	(a) 9,859	(a) S 19,644	..	5,219	2,022	15,695	S 24,973	.. Initial payment on Lodge permit.	* 6,052 53
Do. West	(a) 4,788	(a) 21,025	(a) S 10,743	Fodder grass 61 C.L.	9,012	2,947	30,405	S 40,675	..	10,620
Total	22,516	138,703 (X) 95	G 7,984 S 69,351	Fodder grass 61 C.L.	61,215	27,565	154,853	S116,541	Fodder grass 199 C.L.	50,552
Reserved lands—										
Gōdāvari, Upper	(b) 185	(b) 987	..	..	401	..	..	..	..	..
Do. Lower	(a) 6,959	(a) 8,326	..	..	5,561	..	..	..	Fodder grass.	31
Kistna	..	..	..	..	..	301	91	S 320	..	160
Total	7,144	9,313	..	..	5,962	301	91	S 320	..	191
Grand total	29,660	148,016 (X) 95	G 7,984 S 69,351	Fodder grass 61 C.L.	67,177	27,866	154,944	S 116,861	Fodder grass 199 C.L.	50,743
CENTRAL CIRCLE.										
Bellary	.. ..	.. ..	.. ..	.. ..	.. ..	14,976 ..	61,764 ..	G 51,856 S 168,255	.. ..	37,832
Anantapur	.. .. (i) ..	.. .. ..	.. .. ..	.. .. ..	.. .. ..	4,408 22	69,884 2,298	S 150,029 S 5,098	Fodder grass. 498 C.L.	29,288
Guntūr	(j) 930 .. (k) 969 .. (l) ..	2,581 .. 57,876 .. 2,596	G 2,593 S 7,005 G 12,637 S 67,387 ..	.. ..	2,310 37,435 2,596	16,889	24,759	G 38,709 S 96,168	.. ..	23,620 .. .. ..
Cuddapah, North	.. .. (m)	.. ..	.. ..	.. ..	.. .. ..	1,551	33,947 .. .. Penning fees.	G 6,898 S 84,156 ..	.. ..	18,285 .. 23
Do. East	.. ..	.. ..	.. ..	.. ..	.. ..	2,940 ..	39,931 ..	G 4,540 S 60,024	.. ..	16,487
Nellore	(p)	68,546	G 19,981 S 120,901	.. ..	.. 37,244	8,785	.. Lease of grass. Kancha rents. Penning fees.	..	..	3,294 15 12,993 3
Chingleput	.. ..	.. ..	.. ..	.. ..	.. ..	2,364 ..	32,532 ..	G 542 S 60,784	.. ..	12,820
Chittoor	.. .. ..	.. .. ..	.. .. ..	.. .. ..	.. .. ..	2,620	76,100 .. Penning fees, etc.	G 520 S 53,379	.. .. ..	20,646 23
Total	1,899	131,599	G 35,211 S 195,293	..	79,585	54,555	341,215	G 103,065 S 677,893	..	1,75,329

Districts.	Grazing on payment. Number of animals. At privileged rates. Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received. Actual.	Fees received. Value at full rates.	Grazing free. Number of animals. By right under settlement. Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	During pleasure of Government or otherwise than under settlement. Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Total value of fees at full rates.	Grand total of value at full rates.
1	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
NORTHERN CIRCLE.					RS.	RS.					RS.					RS.	RS.	RS.
Ganjām	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11,412
Vizagapatam	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5,356
Gōdāvari, Upper	(c) 4,934	(c)22,683	(c) S 8,332	..	2,295	6,884	..	..	..	..	..	701	16,638	S 52	..	3,389	3,389	10,273
Do. Lower	(e) 1,694 (f) 15	(e)14,670 (f) 33	..	..	1,027	2,265	..	..	..	..	..	..	..	..	..	..	..	13,216
Kistna	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	21,185
Kurnool, East	..	..	..	..	..	..	157	235	G 762 S 1,140	..	281	..	..	..	..	..	..	32,188
Do. South	..	..	..	..	..	..	2	26	S 66	..	12	..	..	..	..	..	..	11,336
Do. West	..	..	..	..	..	..	..	1,491	S3,303	..	589	..	..	..	..	..	..	20,221
Total	6,643	(q)37,386	S 8,332	..	3,322	9,149	159	1,752	G 762 S 4,509	..	882	701	16,638	S 52	..	3,389	3,389	1,25,187
Reserved lands—																		
Gōdāvari, Upper	(h) 5,641	(h)32,302	h S2,225 h G3,238	11	5,841	8,686	..	..	..	..	..	13	3,531	..	..	667	667	9,754
Do. Lower	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5,592
Kistna	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	160
Total	5,641	32,302	S 2,225 G 3,238	11	5,841	8 686	..	..	..	..	..	13	3,531	..	..	667	667	15,506
Grand total	12,284	(q)69,688	G 3,238 S 10,557	11	9,163	17,835	159	1,752	G 762 S4,509	..	882	714	20,169	S 52	..	4,056	4,056	1,40,693
CENTRAL CIRCLE.																		
Bellary	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	37,832
Anantapur	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	29,288
Guntūr	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	65,961
Cuddapah, North	.. (m) ..	.. 110	.. S 200	.. ..	.. 20	.. 40	..	..	..	..	..	..	..	..	..	..	..	18,348
Do. East	(n) .. (m) ..	106 80	S 350 S 150	.. ..	32	82	..	804	..	..	151	..	..	..	..	..	..	16,720
Nellore	(r)	272	S 727	.. ..	119	159	..	..	..	..	..	..	5,251	..	..	1,313	1,313	55,021
Chingleput	..	(o) ..	S 74	..	2	7	..	..	..	..	..	..	77	..		14	14	12,841
Chittoor	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	.. ..	20,669 ..
Total	..	568	1,501	..	173	288	..	804	..	..	151	..	5,328	..	..	1,327	1,327	2,56,680

* There is an excess collection of Rs. 9.

G. = Goats. S. = Sheep. X. = Young ones at half rates. C.L. = Cart-loads at 5 annas per cart-load.

(a) The enhanced rates are 8 annas per buffalo, 4 annas per cow or bullock and 2 annas per sheep.

(b) The enhanced rates in the Nugur taluk are 8 annas per buffalo and 5 annas per cow or bullock for alien cattle.

(c) The privileged rates in the Bhadrāchalam taluk are 2 annas per buffalo, 1 anna per cow or bullock and 6 pies per sheep.

(d) The enhanced rates are 12 annas per buffalo, 6 annas per cow or bullock and 3 annas per sheep or goat. The full rates in Gōdāvari, Lower, are 4 annas per buffalo, 2 annas per cow or bullock and 1 anna 6 pies per sheep.

Central Circle.—The full rates are As. 6 per buffalo, As. 3 per cow and As. 1-6 per sheep.

As. 1-6 per goat in Bellary, Anantapur and Guntūr,
,, 8 ,, in North and East Cuddapah.
,, 4 ,, in Chingleput and Nellore.
,, 12 ,, in Chittoor.

(i) Half the full rates for half-year.

(j) At As. 8 per buffalo, As. 4 per cow and As. 2 per sheep and goat.

(k) At ,, 12 ,, ,, 6 ,, and ,, 3 ,, ,,

(l) Plough bullocks at Re. 1.

(e) The privileged rate is 1 anna per bullock or cow or buffalo.

(f) One-fourth seigniorage rates at 1 anna per cow and 2 annas per buffalo collected specially in Forest offences

(g) The enhanced rates are Re. 1 per bullock or cow or buffalo and 4 annas per goat.

(h) The privileged rates in the Nugur taluk are 4 annas per buffalo, 2 annas per cow or bull, 1 anna per sheep, 2 annas per horse and 1 anna 3 pies per goat.

(m) At As. 1-6 per cow and 9 pies per sheep.

(n) At 1 anna per cow and 6 pies pers heep.

(o) At one-fourth rate, *i.e.*, As. 4-6 per sheep.

(p) As. 4 per cow, As. 2 per sheep and As. 4 per goat.

(q) Corrected in the Board's office.

(r) As. 3 per cow, and As. 1-6 per sheep.

(s) Excludes 9 buffaloes belonging to the Parlakimedi Maliahs

(t) Do. 1,235 cows do. do.

(u) Do. Rs. 235 received as fees in the Parlakimedi Maliahs.

Return of Grazing in the State forests during 1912-1913—*cont.*

District.	Grazing on payment. Number of animals. At enhanced or special rates. Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received.	At full rates. Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received
1	2	3	4	5	6	7	8	9	10	11
Southern Circle.					RS.					RS.
Vellore, North	..	..	..	..	..	2,422	71,645	G. 5,146 S. 85,803	..	26,245 (g)+ 258
Do. South	..	20,665	..	..	5,166	1,376	86,482	S. 38,883	..	20,377 (a) 34 (g)+ 31
Arcot, South	..	(b) 187	..	..	56	4,308	62,274	S. 143,880	..	26,781 (g)+ 961
Salem, North	2,218	122,163	G 7,316 S. 21,316	..	37,972	144	35,723	S. 22,149	..	8,829 (a) 614
Do. South	..	..	..	..	..	1,118	95,975	S. 30,548	..	21,278 (c) 25
Trichinopoly	..	..	..	..	..	3,792	54,283	G. (d) 700 S. 186,042	2	29,217
Madura	453	70,366	G. 32,730 S. 37,035	407	38,914 (g)—6,216	..	..	..	..	..
Tinnevelly *cum* Rāmnād.	.	..	..	..	..	492	17,145	S. 28,195	..	6,042 (a) 5 (e) 4 (f) 200
Total	2,671	213,381	G. 40,046 S. 58,351	407	75,892	13,652	423,527	G. 5,846 S. 535,500	2	1,40,901
Western Circle. *Reserved Forests.*										
South Canara	..	..	..	..	..	5,328	38,565	..	..	9,229 (r) — 4
Malabar, North	..	..	..	..	.	3,537	6,453	..	(l) 1	2,542
Do. South	..	..	..	..	..	..	..	..	..	(m) 2
The Nilgiris	..	(i) 1,545	..	..	773	9,514	20,665 (k) 150	2,362	..	7,678 (m) 189 (s) + 2
Kollegal *	1,780	56,234	6,159	..	15,718 (j) 11 (t) + 1	..	..	..	..	..
Coimbatore, North *	5,662	84,456	33,178	..	28,092 (m) 1,024	..	..	..	..	..
Do. Central	..	..	..	..	..	206	20,706	14,319	..	5,302 (m) 1,261 (n) 140
Do. South	..	..	..	..	..	369	13,253	150	..	2,637 (e) 100 (q) + 1
Total	7,442	142,235	39,337	..	45,619	18,954	99,792	16,831	1	29,079
Reserved Lands.										
The Nilgiris	..	(i) 414	..	..	207	860	891	..	..	490
Kollegal *	817	19,215	423	..	5,265	..	..	..	..	..
Total	817	19,629	423	..	5,472	860	891	.	..	490
Grand Total, Presidency.	42,489	654,955	S. 362,755 G. 83,241	407	274,345	115,887	1,020,369	S. 1,347,085 G. 108,911	3	396,542

District.	At privileged rates. Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Fees received. Actual.	Fees received. Value at full rates.	Grazing free. Number of animals. By right under settlement. Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	During pleasure of Government or otherwise than under settlement. Buffaloes.	Cows and bullocks.	Goats and sheep.	Other animals.	Value of fees at full rates.	Total value of fees at full rates.	Grand total of value at full rates.
1	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Southern Circle.					RS.	RS.										RS.	RS.	RS.
Vellore, North	103	960	S. 20	..	110	220	..	..	..	..	..	..	..	..	..	(h) 7,500	7,500	34,223
Do. South	2,088	13,589	S. 365	..	1,683	3,366	..	..	..	..	..	439	1,437	S. 34	..	437	437	29,411
Arcot, South	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	27,798
Salem, North	..	..	..	..	..	..	..	..	..	..	..	..	150	..	..	28	28	47,443
Do. South	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	21,303
Trichinopoly	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	29,217
Madura	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	32,698
Tinnevelly *cum* Rāmnād.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6,251
Total	2,191	14,549	S. 385	..	1,793	3,586	..	..	..	..	..	439	1,587	S. 34	..	7,965	7,965	2,28,344
Western Circle. *Reserved Forests.*																		
South Canara	(o)10,041	(o)10,377	..	..	2,552	5,711	..	..	..	..	..	..	..	..	..	..	..	14,936
Malabar, North	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2,542
Do. South	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
The Nilgiris	..	..	(p)19,255	..	84	1,805	..	..	..	..	..	..	..	..	..	..	..	10,447
Kollegal *	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15,730
Coimbatore, North *	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	29,116
Do. Central	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6,703
Do. South	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2,738
Total	10,041	10,377	19,255	..	2,636	7,516	..	..	..	..	..	..	..	..	..	..	..	82,214
Reserved Lands.																		
The Nilgiris	..	..	..	..	..	..	..	..	..	..	..	1,872	..	..	..	702	702	1,399
Kollegal *	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5,265
Total	..		..	..	..	..	..	..	..	..	..	1,872	..	..	..	702	702	6,664
Grand Total, Presidency.	24,516	95,182	31,698 G. 3,238	..	4,613	20,553	159	2,356	4,509	762	1,033	3,025	27,084	86	..	14,050	14,050	6,32,381

G = Goats. S = Sheep.

Southern Circle.—The enhanced or special rates are As. 8 per buffalo, As. 4 per cow, bullock, or other animal, As. 8 per goat and As. 2 per sheep.

The full rates are As. 6 per buffalo, As. 3 per cow, bullock or other animal, As. 12 per goat and As. 1-6 per sheep.

The privileged rates are half the full rates.

(*a*) Penning license fee.
(*b*) 97 cows at As. 4 each, 37 cows at As. 5 each and 53 cows at As. 6 each.
(*c*) Sale amount of grass.
(*d*) At 4 annas each.
(*e*) Renewal fee for issuing permits in lieu of lost ones.
(*f*) Lease amount for grazing in Kavalkutti Parambu Reserved Forest.
(*g*) Added and substracted to tally with Accountant-General's figure.
(*h*) Free removal of grass.

Western Circle.—The full rates are As. 6 per buffalo, As. 3 per cow, bullock or other animals and As. 1-6 per sheep.

* Annas 8 per buffalo, As. 4 per cow, bullock or other animals and As. 2 per sheep.
(*i*) Annas 8 per cow or bullock.
(*j*) Excess remittance made by mistake.
(*k*) Calves, half-rate.
(*l*) Elephants As. 4 per diem for 21 days.
(*m*) Sale-proceeds of fodder grass.
(*n*) Lease amount of the right of grazing.
(*o*) Annas 2 per buffalo, cow or bullock.
(*p*) Annas 3 per 100 per diem.
(*q*) Variation as per Accountant-General's audited figures.
(*r*) Wrongly credited to II (*c*) and included under that head in the Accountant-General's audited figures.
(*s*) Renewal fees on time-expired permits.
(*t*) Added to round off fraction.

ABSTRACT of animals licensed to graze on payment

Circle.	Buffaloes.	Bullocks and cows.	Sheep.	Goats.	Other animals.	Total.
Northern Circle	69,810	(a) 372,743	196,769	11,222	11	(a) 650,555
Central Circle	56,454	473,382	874,687	138,276	..	1,542,799
Southern Circle	(a) 18,514	(a) 651,457	(a) 594,236	45,892	409	(a) 1,310,508
Western Circle	38,114	272,924	75,846	..	1	386,885
Grand Total, Presidency ..	182,892	1,770,506	1,741,538	195,390	421	3,890,747

(a) Corrected in the Board's office.

Annual Form No. 75.

Forest Department, Madras Presidency.

Artificial reproduction for the year 1912–13.

Districts.	Area in acres.				Expenditure during the year.		Total expenditure from commencement.		Revenue during the year.	Total revenue from date of creation of plantation
	On 1st July 1912.	Added during the year.	Excluded during the year.	Area on 30th June 1913.	Creation.	Upkeep.	Creation.	Upkeep.		
1	2	3	4	5	6	7	8	9	10	11
				A.—Regular Plantations.						
Northern Circle.					RS.	RS.	RS.	RS.	RS.	RS.
Ganjām	(b) 412	(c) ..	..	(d) 412	..	(e) 43	28,199	12,786	2,537	13,372
Vizagapatam	78	..	..	78	..	..	..	5	510	2,085
Gōdāvari, Lower	943	80	74	949	3,278	1,841	48,187	21,315	14,815	81,970
Kistna	1,157	9	111	1,055	31	5,077	19,540	57,570	5,946	61,998
Kurnool, East	96	42	8	130	6,371	2,262	38,471	22,441	..	..
Do. South	4	16	..	20	622	2,394	1,500	2,394	..	..
Do. West	893	212	..	1,105	31,159	6,657	2,36,276	26,922	2,357	8,507
Total ..	3,583	359	193	3,749	41,461	18,274	3,72,173	1,43,433	26,165	1,67,932
				B.—Taungya Plantations (a).						
Gōdāvari, Upper	125	..	..	125	..	..	1,826	586	..	934
				C.—Cultural Operations.						
Ganjām	399	..	..	399	..	6	2,232	169	..	..
Vizagapatam	20	24	..	44	129	26	352	83	..	..
Gōdāvari, Upper	827	1	1	827	15	75	2,177	856	..	145
Do. Lower	2,181	221	..	2,402	210	..	2,358	1,032	..	..
Kistna	3,103	545	646	3,002	2,131	205	7,078	2,785	1,494	30,939
Kurnool, East	33	..	..	33	..	1,496	9,684	3,334	..	..
Do. South	101	73	..	174	1,364	198	5,758	700	..	..
Do. West	1,485	463	..	1,948	1,550	...	13,984	..	..	..
Total, Northern Circle ..	8,149	1,327	647	8,829	5,399	2,006	43,624	8,959	1,494	31,084
				A.—Regular Plantations.						
Central Circle.										
Bellary	511	89	* 71	529	617	2,932	8,818	61,007	14	14
Anantapur	..	..	..	..	..	..	..	..	..	..
Guntūr	2,773	549	53	3,269	2,649	12,024	51,814	27,491	5,059	27,190
Cuddapah, North	10	..	..	10	28	..	560	..	..	..
Do. East	1,496	..	1,488	8	..	88	..	..	61	..
Nellore	5,281	10	..	5,291	15,772	1,780	1,56,705	1,780	35,405	4,47,777
Chingleput	356	..	..	356	301	754	7,458	4,876	458	10,074
Chittoor	..	..	..	..	..	..	..	..	..	..
Total ..	10,427	648	1,612	9,463	19,367	17,578	2,25,355	95,154	40,997	4,85,055
				B.—Taungya Plantations—Nil.						
				C.—Cultural Operations.						
Bellary	19,586	† 1,025	..	20,611	5,436	3,567	83,496	7,226	..	..
Anantapur	64,146	6,831	..	70,977	3,039	76	39,644	263	..	274
Guntūr	1	182	..	183	316	..	348	..	..	..
Cuddapah, North	1,313	400	..	1,713	419	24	855	136	560	1,980
Do. East	303	1,488	..	1,791	..	595	492	1,104	..	..
Nellore	462	..	..	462	..	5	2,276	5	..	..
Chingleput	11,888	..	..	11,888	213	536	2,679	4,290	..	..
Chittoor	208	..	..	208	..	368	..	860	38	49
Total, Central Circle ..	97,907	9,926	..	107,833	9,423	5,171	1,29,790	13,884	598	2,303

(a) Will be omitted from next year as all the trees are reported to have died—*vide* paragraph 23 of the circle report.
(b) Excludes Teak plantations of 3 acres belonging to the Parlakimedi Maliahs.
(c) Do. 1 acre do.
(d) Do. 4 acres do.
(e) Excludes Rs. 22-10-0 incurred in the Parlakimedi Maliahs.

* Given up for want of water in the wells. † Includes 300 acres of Badanahal reserve sown by ryots.

Artificial reproduction for the year 1912–13—*cont.*

District.	Area in acres.				Expenditure during the year.		Total expenditure from commencement.		Revenue during the year.	Total revenue from date of creation of plantation.
	On 1st July 1912.	Added during the year.	Excluded during the year.	Area on 30th June 1913.	Creation.	Upkeep.	Creation.	Upkeep.		
1	2	3	4	5	6	7	8	9	10	11
A.—Regular Plantations.										
					RS.	RS.	RS.	RS.	RS.	RS.
SOUTHERN CIRCLE.										
North Vellore	1,260	..	..	1,260	3,341	516	16,786	1,29,213	813	64,086
South ,,	..	..	..	..	..	..	..	..	..	..
South Arcot	1,366	..	..	1,366	3,376	700	40,817	7,956	47,419	2,25,991
North Salem	..	..	..	..	..	..	..	..	..	..
South ,,	552	..	..	552	..	..	31,973	8,715	512	8,761
Trichinopoly	814 (a)—100	10	..	724	104	1,331	34,561	9,062	11,416	28,396
Madura	494 +(b) 3	95	..	592	4,808	816	30,178	4,663	102	1,836
Tinnevelly *cum* Rāmnād	1,757	11	..	1,768	20	681	3,322	5,285	..	..
Total	6,146	116	..	6,262	11,649	4,044	1,57,637	1,64,894	60,262	3,29,070
B.—Taungya Plantations.										
North Vellore	818	..	..	818	77	60	77	* 120	..	* 66
South ,,	237	..	..	237	..	..	..	..	310	2,115
South Arcot	..	..	..	..	..	..	..	..	..	..
North Salem	..	..	..	..	..	..	..	..	..	..
South ,,	..	..	..	..	..	..	..	..	..	..
Trichinopoly	..	..	..	..	..	..	..	..	..	..
Madura	..	..	..	..	..	..	..	..	..	..
Tinnevelly *cum* Rāmnād	1	..	..	1	..	4	7	4	..	..
Total	1,056	..	..	1,056	77	64	84	124	310	2,181
C.—Cultural Operations.										
North Vellore	835	..	..	835	..	..	* 20	..	..	578
South ,,	143	429	..	572	153	49	153	49	..	..
South Arcot	3,605	953	..	4,558	814	..	2,565	487	..	..
North Salem	585	..	..	585	669	..	5,775	30,293	428	7,057
South ,,	656	..	..	656	34	185	1,697	1,018	4	144
Trichinopoly	1,943	..	(c)1,943	..	..	..	..	..	..	..
Madura	7	17	..	24	82	48	155	48	112	112
Tinnevelly *cum* Rāmnād	2,691	342	..	3,033	273	..	4,367	102	..	..
Total, Southern Circle	10,465	1,741	1,943	10,263	2,025	282	14,732	31,997	544	7,891
A.—Regular Plantations.										
WESTERN CIRCLE.										
South Canara	124	..	..	124	..	155	2,462	7,067	860	18,152
Malabar, North	870	..	..	870	..	172	15,164	17,518	200	200
Do. South	6,387	86	..	6,473	429	6,079	5,37,942	5,22,170	1,31,438	16,85,830
The Nilgiris	1,766	..	..	1,766	444	2,283	6,404	2,80,297	26,481	5,14,695
Coimbatore, Central	522	37	..	559	59	20	472	252	..	..
Do. South	157	..	..	157	..	1,027	9,947	2,454	..	..
Total	9,826	123	..	9,949	932	9,736	5,72,391	8,29,758	1,58,979	22,18,877

* Difference due to omission in totals of previous year's return.

(a) Deducted on account of correct area as per working-plan. (b) Added as per correct area now reported.

(c) Portions along the Coleroon left bank were handed over to Public Works Department and the remaining area abandoned. Hence figures in columns 8 and 9 omitted.

Artificial reproduction for the year 1912–13—*cont.*

District.	Area in acres. On 1st July 1912.	Added during the year.	Excluded during the year.	Area on 30th June 1913.	Expenditure during the year. Creation.	Upkeep.	Total expenditure from commencement. Creation.	Upkeep.	Revenue during the year.	Total revenue from date of creation of plantation.	Remarks.
1	2	3	4	5	6	7	8	9	10	11	12
B.—Taungya Plantations.											
WESTERN CIRCLE—*cont.*					RS.	RS.	RS.	RS.	RS.	RS.	
South Canara ..	547	..	..	547	..	..	46	..	..	..	This figure is misleading as the same area is dealt with in more than one year, but has been shown as an annual addition.
Malabar, North ..	753	..	..	753	..	95	..	10,728	145	4,783	
Total ..	1,300	..	..	1,300	..	95	46	10,728	145	4,783	
C.—Cultural Operations.											
South Canara ..	..	..	..	..	..	(*a*) 12	..	185	..	..	
Malabar, North ..	139	1,672	..	1,811	538	235	538	6,517	..	..	
Do. South ..	212	2	..	214	124	185	2,168	1,248	..	..	
The Nilgiris ..	505	..	..	505	5	114	367	29,302	..	..	
Kollegal ..	6,532	38	..	6,570	123	149	(*b*) 330	149	..	..	
Coimbatore, North ..	19,744	5,868	..	25,612	186	..	375	..	159	159	
Do. Central ..	295	237	..	532	406	105	1,095	194	..	37	
Do. South ..	473	226	..	699	173	47	2,031	1,096	..	..	
Total ..	27,900	8,043	..	35,943	1,555	847	6,904	38,691	159	196	
Total, Western Circle.	39,026	8,166	..	47,192	2,487	10,678	5,79,341	8,79,177	1,59,283	22,23,856	
Total, Regular Plantations, Presidency.	29,982	1,246	1,805	29,423	73,409	49,632	13,27,556	12,33,239	2,86,403	32,00,934	
Total, Taungya Plantations, Presidency.	2,481	..	..	2,481	77	159	1,956	11,438	455	7,898	
Total, Cultural Operations, Presidency.	144,421	21,037	2,590	162,868	18,402	8,306	1,95,050	93,531	2,795	41,474	
Grand Total, Regular Plantations, Cultural Operations and Taungya, Presidency.	176,884	22,283	4,395	194,772	91,888	58,097	15,24,562	13,38,208	2,89,653	32,50,306	

(*a*) Cost incurred in sowing seeds broadcast in several reserved forests

(*b*) Excludes Rs. 2 wrongly added by the Collector last year.

ANNUAL
Forest Department,
OUTTURN (in cubic feet solid) of Timber, Fuel and Bamboos

FORM No. 76.
Madras Presidency.
(in number) during the year 1912–13, and Agency of Exploitation.

District.	Timber.					Fuel.					Total.	Bamboos.									
	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.	Outturn.	Government.		Purchasers.		Free-grantees.		Right-holders.		Total.	
												Number.	Value in Rs.	Number.	Value in Rs.	Number.	Value in Rs.	Number.	Value in Rs.	Number.	Value in Rs.
1	2	3	4	5	6	7	8	9	10	11	12	13		14		15		16		17	
NORTHERN CIRCLE.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. F.	C. FT.	C. FT.										
Ganjām.																					
Reserved forests—																					
Sâl	14,847	44,090	..	..	58,937	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	8,822	2,636	8,920	..	20,378	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	23,669	46,726	8,920	..	79,315	39,948	5,500	..	..	45,448	124,763	595,723	4,991	342,308	1,607	26,640	177	..	..	964,671	6,775
Unreserved lands—																					
Sâl	11,282	24,211	..	..	35,493	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	5,312	435,333	3,190	..	443,835	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	16,594	459,544	3,190	..	479,328	626	420,814	..	..	421,440	900,768	150	1	146,840	825	14,360	88	..	..	161,350	914
Total, Ganjām ..	(a)40,263	(b)506,270	(c) 12,110	..	(d)558,643	40,574	(e)426,314	..	..	(e)466,888	(f)1,025,531	(g) 595,873	4,992	(h) 489,148	2,432	(i) 41,000	265	..	..	(j)1,126,021	7,689
Vizagapatam.																					
Reserved forests—																					
Miscellaneous	527	140	37	..	704	69,210	39,510	..	..	108,720	109,424	833,837	12,625	394,798	3,482	300	2	..	..	1,228,935	16,109
Unreserved lands—																					
Yegisi	115	..	..	..	115	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Maddi	215	..	..	..	215	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	1,150	61,406	60	..	62,616	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	1,480	61,406	60	..	62,946	..	35,124	..	..	35,124	98,070	640	12	56,110	563	..	..	..	..	56,750	575
Total, Vizagapatam ..	2,007	61,546	97	..	63,650	69,210	74,634	..	..	143,844	• 207,494	834,477	12,637	450,908	4,045	300	2	..	..	1,285,685	16,684
Gōdāvari, Upper.																					
Reserved forests—																					
Teak	139	1,449	..	..	1,588	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Maddi	561	..	..	..	561	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	1,296	3	..	..	1,299	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	1,996	1,452	..	..	3,448	..	..	..	..	..	3,448	1,000	5	1,036,225	6,914	..	..	..	..	1,037,225	6,919
Reserved lands—																					
Teak	..	37,533	..	..	37,533	..	..	..	..	..	37,533	..	..	27,900	279	..	..	..	..	27,900	279
Unreserved lands—																					
Teak	892	48,286	..	..	49,178	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Maddi	..	31,221	461	..	31,682	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Yegisi	2	6,282	50	..	6,334	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	5,564	49,704	2,657	..	57,925	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	6,458	135,493	3,168	..	145,119	2,144	43,796	..	..	45,940	191,059	..	..	408,800	2,044	..	..	..	..	408,800	2,044
Total, Gōdāvari, Upper ..	8,454	174,478	3,168	..	186,100	2,144	43,796	..	..	45,940	232,040	1,000	5	1,472,925	9,237	..	..	..	..	1,473,925	9,242
Gōdāvari, Lower.																					
Reserved forests—																					
Teak	3,280	..	..	..	3,280	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Maddi	623	..	..	..	623	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Yegisi	365	..	..	..	365	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	3,930	632	..	..	4,562	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	8,198	632	..	..	8,830	150,283	8,050	..	..	158,333	167,163	8,664	43	8,680	69	..	..	..	..	17,344	112
Unreserved lands—																					
Teak	..	9	..	..	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Maddi		17,799	..	..	17,799	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Yegisi	..	27,130	..	..	27,130	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	445	217,266	..	..	217,711	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	445	262,204	..	..	262,649	7,692	242,247	..	..	249,939	512,588	4,940	25	6,897,437	35,852	..	..	..	..	6,902,377	35,877
Total, Gōdāvari, Lower ..	8,643	262,836	..	..	271,479	157,975	250,297	..	..	408,272	679,751	13,604	68	6,906,117	35,921	..	..	..	..	6,919,721	35,989

(a) Excludes 3,197 c. ft. belonging to the Parlakimedi Maliahs.
(b) Do. 4,213 do. do.
(c) Do. 800 do. do.
(d) Do. 8,210 do. do.
(e) Do. 43,462 do. do

(f) Excludes 51,672 c. ft. belonging to the Parlakimedi Maliahs.
(g) Do. 57,613 bamboos do. do.
(h) Do. 15,957 do. do.
(i) Do. 2,000 do. do.
(j) Do. 75,570 do. do. , but erroneously entered in the District return as 97,528.
• Corrected in the Board's office.

Outturn (in cubic feet solid) of Timber, Fuel and Bamboos (in number) during the year 1912-13, and Agency of Exploitation—*cont.*

District.	Timber. Govern-ment.	Timber. Pur-chasers.	Timber. Free-grantees.	Timber. Right-holders.	Timber. Total.	Fuel. Govern-ment.	Fuel. Pur-chasers.	Fuel. Free-grantees.	Fuel. Right-holders.	Fuel. Total.
1	2	3	4	5	6	7	8	9	10	11
NORTHERN CIRCLE—*cont.*	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.
Kistna.										
Reserved forests— Miscellaneous	2,216	40,378	..	..	42,594	80,503	1,888,717	..	..	1,969,220
Unreserved lands— Miscellaneous	1,173	136,168	4,320	..	141,661	..	56,874	..	..	56,874
Total, Kistna ..	3,389	176,546	4,320	..	184,255	80,503	1,945,591	..	..	2,026,094
Kurnool, East.										
Reserved forests— Teak	2,325	..	..	..	2,325	..	..	..	..	..
Yegisi	9,712	4	..	..	9,716	..	..	..	..	..
Yepi	335	1	..	..	336	..	..	..	..	..
Miscellaneous	4,794	89	..	..	4,883	..	..	..	..	..
Total ..	17,166	94	..	..	17,260	2,800	..	..	..	2,800
Unreserved lands— Miscellaneous	..	28,260	..	..	28,260	..	1,762	..	..	1,762
Total, Kurnool, East ..	17,166	28,354	..	..	45,520	2,800	1,762	..	..	4,562
Kurnool, South.										
Reserved forests— Teak	2,756	..	..	..	2,756	..	..	..	..	..
Maddi	4,158	..	..	..	4,158	..	..	..	..	..
Yegisi	2,207	..	..	..	2,207	..	..	..	..	..
Yepi	135	..	..	..	135	..	..	..	..	..
Miscellaneous	30,031	18,710	600	20	49,361	..	..	..	..	..
Total ..	39,287	18,710	600	20	58,617	648,027	40,440	..	300	688,767
Unreserved lands— Miscellaneous	..	27,490	1,670	..	29,160	..	93,890	..	..	93,890
Total, Kurnool, South ..	39,287	46,200	2,270	20	87,777	648,027	134,330	..	300	(a)782,657
Kurnool, West.										
Reserved forests— Teak	4,139	..	..	..	4,139	..	..	..	..	..
Yegisi	6,460	..	..	..	6,460	..	..	..	..	..
Maddi	8,615	..	..	..	8,615	..	..	..	..	..
Miscellaneous	185,343	3,661	678	787	190,469	..	..	..	..	..
Total ..	204,557	3,661	678	787	209,683	458,911	1,110	..	154,506	614,527
Unreserved lands— Miscellaneous	..	2,820	..	..	2,820	..	114,080	..	..	114,080
Total, Kurnool, West ..	204,557	(a) 6,481	678	787	212,503	458,911	115,190	..	154,506	728,607
Abstract.										
Reserved forests— Sal (*Shorea robusta*)	14,847	44,090	..	..	58,937	..	..	..	..	..
Teak (*Tectona grandis*) ..	12,639	1,449	..	..	14,088	..	..	..	..	..
Yegisi (*Pterocarpus Marsupium*).	18,744	4	..	..	18,748	..	..	..	..	..
Yepi (*Hardwickia binata*) ..	470	1	..	..	471	..	..	..	..	..
Maddi (*Terminalia tomentosa*).	13,957	..	..	..	13,957	..	..	..	..	..
Miscellaneous	236,959	66,249	10,235	807	314,250	..	..	..	..	..
Total, Northern Circle ..	297,616	111,793	10,235	807	420,451	1,449,682	1,983,327	..	154,806	3,587,815
Reserved lands— Teak	..	37,533	..	..	37,533	..	..	..	..	..
Unreserved lands— Sal (*Shorea robusta*)	11,282	24,211	..	..	35,493	..	..	..	..	..
Teak (*Tectona grandis*)	892	48,295	..	..	49,187	..	..	..	..	..
Yegisi (*Pterocarpus Marsupium*).	117	33,412	50	..	33,579	..	..	..	..	..
Maddi (*Terminalia tomentosa*) ..	215	49,020	461	..	49,696	..	..	..	..	..
Miscellaneous	13,644	958,447	11,897	..	983,988	..	..	..	..	..
Total, Northern Circle ..	26,150	1,113,385	12,408	..	1,151,943	10,462	1,008,587	..	..	1,019,049

District.	Total. Outturn.	Bamboos. Government.		Bamboos. Purchasers.		Bamboos. Free-grantees.		Bamboos. Right-holders		Bamboos. Total.	
1	12	13		14		15		16		17	
NORTHERN CIRCLE—*cont.*	C. FT.	NO.	RS.	NO.	RS.	NO.	RS.	NO.	RS.	NO.	RS.
Kistna.											
Reserved forests— Miscellaneous	2,011,814	29,075	273	29,375	344	..	..	..	..	58,450	617
Unreserved lands— Miscellaneous	198,535	..	..	..	..	..	..	..	..	..	..
Total, Kistna ..	2,210,349	29,075	273	29,375	344	..	..	..	..	58,450	617
Kurnool, East.											
Reserved forests— Teak	..	..	..	..	..	..	..	..	..	..	..
Yegisi	..	..	..	..	..	..	..	..	..	..	..
Yepi	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	..	..	..	..	..	..	..	..	..	..	..
Total ..	20,060	726	7	31,470	315	5,370	54	..	..	37,566	376
Unreserved lands— Miscellaneous	30,022	..	..	..	..	..	..	..	..	..	..
Total, Kurnool, East ..	50,082	726	7	31,470	315	5,370	54	..	..	37,566	376
Kurnool, South.											
Reserved forests— Teak	..	..	..	..	..	..	..	..	..	..	..
Maddi	..	..	..	..	..	..	..	..	..	..	..
Yegisi	..	..	..	..	..	..	..	..	..	..	..
Yepi	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	..	..	..	..	..	..	..	..	..	..	..
Total ..	747,384	204,364	2,424	567,603	7,060	700	18	..	..	772,667	9,502
Unreserved lands— Miscellaneous	123,050	..	..	..	..	..	..	..	..	..	..
Total, Kurnool, South ..	870,434	204,364	2,424	567,603	7,060	700	18	..	..	772,667	9,502
Kurnool, West.											
Reserved forests— Teak	..	..	..	..	..	..	..	..	..	..	..
Yegisi	..	..	..	..	..	..	..	..	..	..	..
Maddi	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	..	..	..	..	..	..	..	..	..	..	..
Total ..	824,210	2,367,618	24,581	721,268	12,189	300	3	12,293	61	3,101,479	36,834
Unreserved lands— Miscellaneous	116,900	..	..	..	..	..	..	..	..	..	..
Total, Kurnool, West ..	941,110	2,367,618	24,581	721,268	12,189	300	3	12,293	61	3,101,479	36,834
Abstract.											
Reserved forests— Sal (*Shorea robusta*)	..	..	..	..	..	..	..	..	..	..	..
Teak (*Tectona grandis*) ..	..	..	..	..	..	..	..	..	..	..	..
Yegisi (*Pterocarpus Marsupium*).	..	..	..	..	..	..	..	..	..	..	..
Yepi (*Hardwickia binata*) ..	..	..	..	..	..	..	..	..	..	..	..
Maddi (*Terminalia tomentosa*).	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	..	..	..	..	..	..	..	..	..	..	..
Total, Northern Circle ..	4,008,266	4,041,007	44,949	3,131,727	31,980	33,310	254	12,293	61	7,218,337	77,244
Reserved lands— Teak	37,533	..	..	27,900	279		..	..	..	27,900	279
Unreserved lands— Sal (*Shorea robusta*)	..	..	..	..	..	..	..	..	..	..	..
Teak (*Tectona grandis*)	..	..	..	..	..	..	..	..	..	..	..
Yegisi (*Pterocarpus Marsupium*).	..	..	..	..	..	..	..	..	..	..	..
Maddi (*Terminalia tomentosa*) ..	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	..	..	..	..	..	..	..	..	..	..	..
Total, Northern Circle ..	2,170,992	5,730	38	7,509,187	39,284	14,360	88	..	..	7,529,277	39,410

(a) Corrected in the Board's office.

Outturn (in cubic feet solid) of Timber, Fuel and Bamboos (in number) during the year 1912–13, and Agency of Exploitation—*cont.*

Abstract—cont.

District.	Timber. Govern-ment.	Timber. Pur-chasers.	Timber. Free-grantees.	Timber. Right-hold-ers.	Timber. Total.	Fuel. Govern-ment.	Fuel. Pur-chasers.	Fuel. Free-gran-tees.	Fuel. Right-hold-ers.	Fuel. Total.
1	2	3	4	5	6	7	8	9	10	11
NORTHERN CIRCLE—*cont.*	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.		C. FT.
Reserved forests, reserved lands and unreserved lands—										
Sal (*Shorea robusta*)	26,129	68,301	..	..	94,430	..	..	..	..	..
Teak (*Tectona grandis*) ..	13,531	87,277	..	..	100,808	..	..	..	..	..
Yegisi (*Pterocarpus Marsupium*)	18,861	33,416	50	..	52,327	..	..	..	..	..
Yepi (*Hardwickia binata*) ..	470	1	..	..	471	..	..	..	..	..
Maddi (*Terminalia tomentosa*)	14,172	49,020	461	..	63,653	..	..	..	..	..
Miscellaneous	250,603	1,024,696	22,132	807	1,298,238	..	..	..	..	..
Grand Total N.C. ..	323,766	(*a*)1,262,711	22,643	807	(*a*)1,609,927	1 460,144	2,991,914	..	154,806	4,606,864
CENTRAL CIRCLE.										
Bellary.										
Reserved forests— Miscellaneous	4,149	3,344	..	..	7,493	10,283	154,400	..	..	164,683
Leased forests— Sandalwood (*Santalum album*).	294	..	..	..	294	..	..	..	..	..
Miscellaneous	..	..	..	..	..	4,850	107,050	..	..	111,900
Unreserved lands— Miscellaneous	492	52,372	..	..	52,864	..	140,529	..	..	140,529
Total, Bellary ..	4,935	55,716	..	..	60,651	15,133	401,979	..	..	417,112
Anantapur.										
Reserved forests— Miscellaneous	320	600	4,680	..	5,600	36,985	24,615	..	..	61,600
Unreserved lands— Miscellaneous	..	461,100	4,342	..	465,442	6,975	191,958	..	..	198,933
Total, Anantapur ..	320	461,700	9,022	..	471,042	43,960	216,573	..	..	260,533
Guntūr.										
Reserved forests— Miscellaneous	17,948	17,728	1,008	..	36,684	635,040	261,184	..	..	896,224
Unreserved lands— Miscellaneous	880	428,416	24,864	..	454,160	58,310	10,816	..	..	69,126
Total, Guntūr ..	18,828	446,144	25,872	..	490,844	693,350	272,000	..	..	965,350
Cuddapah, North.										
Reserved forests— Miscellaneous	5,209	..	1,240	..	6,449	59,700	2,926	..	..	62,626
Unreserved lands— Miscellaneous	..	44,589	200	..	44,789	..	224,369	..	..	224,369
Total, Cuddapah, North ..	5,209	44,589	1,440	..	51,238	59,700	227,295	..	..	286,995
Cuddapah, East.										
Reserved forests— Miscellaneous	34,013	435	3,800	..	38,248	293,100	1,405,317	..	..	1,698,417
Unreserved lands— Miscellaneous	..	10,330	..	..	10,330	..	28,288	..	..	28,288
Total, Cuddapah, East ..	34,013	10,765	3,800	..	48,578	293,100	1,433,605	..	..	1,726,705
Nellore.										
Reserved forests— Miscellaneous	380	4,710	2,800	..	7,890	26,622	960,271	20	..	986,913
Unreserved lands— Miscellaneous	533	84,369	6,422	..	91,324	430	51,232	..	..	51,662
Total, Nellore ..	913	89,079	9,222	..	99,214	27,052	1,011,503	20	..	1,038,575

District.	Total. Outturn.	Bamboos. Government. Number.	Government. Value in Rs.	Purchasers. Number.	Purchasers. Value in Rs.	Free-grantees. Number.	Free-grantees. Value in Rs.	Right-holders. Number.	Right-holders. Value in Rs.	Total. Number.	Total. Value in Rs.
1	12	13		14		15		16		17	
NORTHERN CIRCLE—*cont.*	C. FT.	NO.	RS.	NO.	RS.	NO.	RS.	NO.	RS.	NO.	RS.
Sal (*Shorea robusta*)	..	..	..	..	..	..	..	..	..	..	..
Teak (*Tectona grandis*)	..	..	..	..	..	..	..	..	..	..	..
Yegisi (*Pterocarpus Marsupium*)	..	..	..	..	..	..	..	..	..	..	..
Yepi (*Hardwickia binata*)	..	..	..	..	..	..	..	..	..	..	..
Maddi (*Terminalia tomentosa*)	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	..	..	..	..	..	..	..	..	..	..	..
Grand Total N.C.	6,179,258	4,046,737	44,987	10,668,814	71,543	47,670	342	12,293	61	14,775,514	1,16,933
Bellary. Reserved forests— Miscellaneous	172,176	150	3	5,160	45	..	..	..	..	5,310	48
Leased forests— Sandalwood (*Santalum album*)	294	..	..	..	..	..	..	..	..	..	..
Miscellaneous	111,900	6650	301	31,736	1,655	..	..	..	..	38,386	1,956
Unreserved lands— Miscellaneous	193,393	..	..	560	5	..	..	..	..	560	5
Total, Bellary	477,763	6,800	304	37,456	1,705	..	..	..	..	44,256	2,009
Anantapur. Reserved forests— Miscellaneous	67,200	3,925	259	..	..	..	..	..	..	3,925	259
Unreserved lands— Miscellaneous	664,375	..	..	..	..	..	..	..	..	..	..
Total, Anantapur	731,575	3,925	259	..	..	..	..	..	..	3,925	259
Guntūr. Reserved forests— Miscellaneous	932,908	..	..	..	..	..	..	..	..	..	..
Unreserved lands— Miscellaneous	523,286	..	..	160	10	..	..	..	..	160	10
Total, Guntūr	1,456,194	..	..	160	10	..	..	..	..	160	10
Cuddapah, North. Reserved forests— Miscellaneous	69,075	380	28	10	..	5,900	74	..	..	6,290	102
Unreserved lands— Miscellaneous	269,158	..	..	..	..	..	..	..	..	..	..
Total, Cuddapah, North	338,233	380	28	10	..	5,900	74	..	..	6,290	102
Cuddapah, East. Reserved forests— Miscellaneous	1,736,665	440	3	774,310	6,188	18,100	255	..	..	792,850	6,446
Unreserved lands— Miscellaneous	38,618	..	..	..	..	..	..	..	..	..	..
Total, Cuddapah, East	1,775,283	440	3	774,310	6,188	18,100	255	..	..	792,850	6,446
Nellore. Reserved forests— Miscellaneous	994,803	12	1	..	..	..	..	..	..	12	1
Unreserved lands— Miscellaneous	142,986	..	..	2,412	13	..	..	..	..	2,412	13
Total, Nellore	1,137,789	12	1	2,412	13	..	..	..	..	2,424	14

(*a*) Corrected in the Board's office.

Outturn (in cubic feet solid) of Timber, Fuel and Bamboos (in number) during the year 1912-13, and Agency of Exploitation—*cont.*

District.	Timber.					Fuel.					Total.	Bamboos.									
	Govern-ment.	Pur-chasers.	Free-grantees.	Right-hol-ders.	Total.	Govern-ment.	Pur-chasers.	Free-grantees.	Right-hol-ders	Total.	Outturn.	Government.		Purchasers.		Free-grantees.		Right-holders.		Total.	
												No.	Value in Rs.	No.	Value in Rs.	No.	Value in Rs.	No.	Value in Rs.	No.	Value in Rs.
1	2	3	4	5	6	7	8	9	10	11	12	13		14		15		16		17	
CENTRAL CIRCLE—*cont.*	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT	C. FT.	C. FT.										
Chingleput.																					
Reserved forests—Miscellaneous	4	..	..	..	4	1,745	126,496	..	..	128,241	128,245	..	..	..	..	..	..	..	..	..	..
Unreserved lands—Miscellaneous	..	211,736	1,840	..	213,576	..	85,392	..	..	85,392	298,968	..	..	558	35	78	10	..	..	636	45
Total, Chingleput ..	4	211,736	1,840	..	213,580	1,745	211,888	..	..	213,633	427,213	..	..	558	35	78	10	..	..	636	45
Chittoor.																					
Reserved forests—Red sanders (*Pterocarpus santalinus*).	1,030	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sandalwood (*Santalum album*).	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	1,756	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	2,789	..	127	..	2,916	283,846	264,557	..	..	548,403	551,319	76,781	480	866,316	3,992	800	5	..	..	943,897	4,477
Unreserved lands—Miscellaneous	..	62,284	6,794	..	69,078	..	161,828	..	..	161,828	230,906	..	..	..	.	72	1	..	..	72	1
Total, Chittoor ..	2,789	62,284	6,921	..	71,994	283,846	426,385	..	..	710,231	782,225	76,781	480	866,316	3,992	872	6	..	..	943,969	4,478
Abstract.																					
Reserved and leased forests—Red sanders (*Pterocarpus santalinus*).	1,030	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sandalwood (*Santalum album*).	297	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	63,779	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total C.C. ..	65,106	26,817	13,655	..	105,578	1,352,171	3,306,816	20	..	4,659,007	4,764,585	88,338	1,075	1,677,532	11,880	24,800	334	..	..	1,790,670	13,289
Unreserved lands—Miscellaneous	1,905	1,355,196	44,462	..	1,401,563	65,715	894,412	..	..	960,127	2,361,690	..	..	3,690	63	150	11	..	..	3,840	74
Grand total C.C. ..	67,011	1,382,013	58,117	..	1,507,141	1,417,886	4,201,228	20	..	5,619,134	7,126,275	88,338	1,075	1,681,222	11,943	24,950	345	..	..	1,794,510	13,363
SOUTHERN CIRCLE.																					
Vellore, North.																					
Reserved forests—Miscellaneous	27	13,424	38	..	13,489	5,304	496,723	..	..	502,027	515,516	..	..	233,584	3,503	..	..	..	..	233,584	3,503
Unreserved lands—Miscellaneous	..	21,670	8,985	..	30,655	..	59,760	..	..	59,760	90,415	..	..	..	..	..	..	..	..	..	..
Total, Vellore, North .	27	35,094	9,023	..	44,144	5,304	556,483	..	..	561,787	605,931	..	..	233,584	3,503	..	..	..	..	233,584	3,503
Vellore, South.																					
Reserved forests—Sandalwood (*Santalum album*).	7,572	..	..	..	7,572	..	..	..	..	..	.	..	..	..	..	..	..	..	..	..	..
Miscellaneous	205	245	..	..	450	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	7,777	245	..	..	8,022	480	217,961	..	..	218,441	226,463	..	..	4,299,033	35,788	..	..	..	..	4,299,033	35,788
Unreserved lands—Miscellaneous	.	143,838	4,700	..	148,538	..	87,099	..	..	87,099	235,637	..	..	132,008	800	9,916	79	..	..	141,924	879
Total, Vellore, South ..	7,777	144,083	4,700	..	156,560	480	305,060	..	..	305,540	462,100	..	..	4,431,041	36,588	9,916	79	..	..	4,440,957	36,667
Arcot, South.																					
Reserved forests—Miscellaneous	3	148	..	..	151	204,685	396,243	800	..	601,728	601,879	1,440	156	31,366	270	..	..	..	..	32,806	426
Unreserved lands—Miscellaneous	340	175,647	9,705	..	185,692	20	199,970	..	..	199,990	385,682	..	..	488	45	..	..	..	..	488	45
Total, Arcot, South ..	343	175,795	9,705	..	185,843	204,705	596,213	800	..	801,718	987,561	1,440	156	31,854	315	..	..	..	..	33,294	471

Outturn (in cubic feet solid) of Timber, Fuel and Bamboos (in number) during the year 1912-13, and Agency of Exploitation—*cont.*

District.	Timber. Government.	Timber. Purchasers.	Timber. Free-grantees.	Timber. Right-holders.	Timber. Total.	Fuel. Government.	Fuel. Purchasers	Fuel. Free-grantees.	Fuel. Right-holders.	Fuel. Total.
1	2	3	4	5	6	7	8	9	10	11
SOUTHERN CIRCLE—*cont.*	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.
Salem, North.										
Reserved forests—										
Sandalwood (*Santalum album*).	603	..	..	..	603	..	..	..	..	..
Miscellaneous	2,437	504	..	..	2,941	..	..	..	..	..
Total ..	3,040	504	..	..	3,544	1,766	224,978	..	..	226,744
Unreserved lands—										
Miscellaneous	2,848	115,142	966	..	118,956	138	101,135	..	..	101,273
Total, Salem, North ..	5,888	115,646	966	..	122,500	1,904	326,113		..	328,017
Salem, South.										
Reserved forests—										
Sandalwood (*Santalum album*).	88	..	..	..	88	..	..	..	..	..
Miscellaneous	690	81	1,590	..	2,361	..	..	..	..	..
Total ..	778	81	1,590	..	2,449	1,128	466,625	..	..	467,753
Unreserved lands—										
Sandalwood (*Santalum album*).	209	..	..	..	209	..	..	..	..	..
Miscellaneous	381	144,869	..	..	145,250	..	..	..	..	..
Total ..	590	144,869	..	..	145,459	2,332	178,032	..	..	180,364
Total, Salem, South ..	1,368	144,950	1,590	..	147,908	3,460	644,657	..	..	648,117
Trichinopoly.										
Reserved forests—										
Sandalwood (*Santalum album*).	2	..	..	..	2	..	..	..	..	..
Miscellaneous	562	1,212	..	..	1,774	..	..	..	..	..
Total ..	564	1,212	..	..	1,776	40,150	811,803	103,361	..	955 314
Unreserved lands—										
Miscellaneous	..	195,909	4,855	..	200,764	53,555	1,107,835	..	..	1,161,390
Total, Trichinopoly ..	564	197,121	4,855	..	202,540	93,705	1,919,658	103,361	...	2,116,704
Madura.										
Reserved forests—										
Teak (*Tectona grandis*) ..	198	..	..	..	198	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	71	..	..	..	71	..	..	..	..	..
Pterocarpus Marsupium ..	261	..	..	..	261	..	..	..	..	..
Miscellaneous	495	44,271	1,437	..	46,203	..	..	..	..	..
Total ..	1,025	44,271	1,437	..	46,733	326	804,386	..	..	804,712
Unreserved lands—										
Miscellaneous	3,031	100,864	..	..	103,895	35,678	463,691	140	20	499,529
Total, Madura ..	4,056	145,135	1,437	..	150,628	36,004	1,268,077	140	20	1,304,241
Tinnevelly.										
Reserved forests—										
Miscellaneous	12,512	1,742	..	..	14,254	8,486	502,023	..	..	510,509
Unreserved lands—										
Miscellaneous	..	23,663	..	..	23,663	..	141,101	..	..	141,101
Total, Tinnevelly ..	12,512	25,405	..	..	37,917	8,486	643,124	..	..	651,610

District.	Total. Outturn.	Bamboos. Government. No.	Government. Value in Rs.	Purchasers. No.	Purchasers. Value in Rs.	Free-grantees. No.	Free-grantees. Value in Rs.	Right-holders. No.	Right-holders. Value in Rs.	Total. No.	Total. Value in Rs.
1	12	13		14		15		16		17	
SOUTHERN CIRCLE—*cont.*	C. FT.										
Salem, North.											
Reserved forests—											
Sandalwood (*Santalum album*).	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	..	..	..	..	..	..	..	..	..	..	..
Total ..	230,288	162	31	3,260,148	6,570	..	..	..	..	3,260,310	6,601
Unreserved lands—											
Miscellaneous	220,229	1,923	222	116,945	3,285	445	4	..	..	119,313	3,511
Total, Salem, North ..	450,517	2,085	253	3,377,093	9,855	445	4	..	..	3,379,623	10,112
Salem, South.											
Reserved forests—											
Sandalwood (*Santalum album*).	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	..	..	..	..	..	..	..	..	..	..	..
Total ..	470,202	..	..	4,222,351	26,390	15,660	98	..	..	4,238,011	26,488
Unreserved lands—											
Sandalwood (*Santalum album*).	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	..	..	..	..	..	..	..	..	..	..	..
Total ..	325,823	380	2	159,175	995	..	..	..	..	159,555	997
Total, Salem, South ..	796,025	380	2	4,381,526	27,385	15,660	98	..	..	4,397,566	27,485
Trichinopoly.											
Reserved forests—											
Sandalwood (*Santalum album*).	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	..	..	..	..	..	..	..	..	..	..	..
Total ..	957,090	23	6	61,193	2,225	360	45	..	..	61,576	2,276
Unreserved lands—											
Miscellaneous	1,362,154	..	..	533	167	60	6	..	..	593	173
Total, Trichinopoly ..	2,319,244	23	6	61,726	2,392	420	51	..	..	62,169	2,449
Madura.											
Reserved forests—											
Teak (*Tectona grandis*) ..	..	..	..	..	..	..	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	..	..	..	..	..	..	..	..	..	..	..
Pterocarpus Marsupium ..	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	..	..	..	..	..	..	..	..	..	..	..
Total ..	851,445	287	2	114,508	5,404	..	..	..	..	114,795	5,406
Unreserved lands—											
Miscellaneous	603,424	..	..	..	..	..	..	..	..	..	..
Total, Madura ..	1,454,869	287	2	114,508	5,404	..	..	..	..	114,795	5,406
Tinnevelly.											
Reserved forests—											
Miscellaneous	524,763	67	4	28,060	108	..	..	..	..	28,127	112
Unreserved lands—											
Miscellaneous	164,764	..	..	1,500	4	..	..	..	..	1,500	4
Total, Tinnevelly ..	689,527	67	4	29,560	112	..	..	..	..	29,627	116

Outturn (in cubic feet solid) of Timber, Fuel and Bamboos (in number) during the year 1912–13, and Agency of Exploitation—*cont.*

District.	Timber. Govern-ment.	Timber. Pur-chasers.	Timber. Free-grantees.	Timber. Right-hold-ers.	Timber. Total.	Fuel. Govern-ment.	Fuel. Pur-chasers.	Fuel. Free-gran-tees.	Fuel. Right-hold-ers.	Fuel. Total.
1	2	3	4	5	6	7	8	9	10	11
SOUTHERN CIRCLE—*cont.*	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.
										Abs
Reserved forests—										
Sandalwood (*Santalum album*).	8,265	..	..	..	8,265	..	..	..	..	..
Teak (*Tectona grandis*) ..	198	..	..	..	198	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	71	..	..	..	71	..	..	..	..	..
Pterocarpus Marsupium ..	261	..	..	..	261	..	..	..	..	..
Miscellaneous	16,931	61,627	3,065	..	81,623	..	..	..	..	..
Total S.C ..	25,726	61,627	3,065	..	90,418	262,325	3,920,742	104,161	..	4,287,228
Unreserved lands—										
Sandalwood (*Santalum album*).	209	..	..	..	209	..	..	..	..	..
Miscellaneous	6,600	921,602	29,211	..	957,413	..	..	..	..	..
Total S.C. ..	6,809	921,602	29,211	..	957,622	91,723	2,338,623	140	20	2,430,506
Total, Reserved forests and unreserved lands, S.C.	32,535	983,229	32,276	..	1,048,040	354,048	6,259,365	104,301	20	6,717,734
WESTERN CIRCLE.										
South Canara.										
Reserved forests—										
Teak (*Tectona grandis*) ..	666	..	..	..	666	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	309	100	..	..	409	..	..	..	..	..
Pterocarpus Marsupium ..	106	..	..	..	106	..	..	..	..	..
Ironwood (*Xylia dolabriformis*)	1,919	..	..	..	1,919	..	..	..	..	..
Hopea parviflora	122	400	..	..	522	..	..	..	..	..
Miscellaneous	7,235	796	..	..	8,031	..	..	..	.	..
Total ..	10,357	1,296	..	..	11,653	528,200	663,327	..	..	1,191,527
Reserved lands—*Nil.*										
Unreserved lands—										
Teak (*Tectona grandis*)	..	1,150	..	1,300	2,450	..	..	..	..	..
Sandalwood (*Santalum album*).	..	218	..	.	218	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	..	1,254	75	425	1,754	..	..	..	..	..
Pterocarpus Marsupium ..	..	125	..	425	550	..	..	..	..	..
Ironwood (*Xylia dolabriformis*).	..	915	..	625	1,540	..	..	..	..	..
Hopea parviflora	..	6,847	1,000	16,150	23,997	..	..	..	..	..
Ebony (*Diospyros Ebenum*) ..	..	2,175	..	..	2,175	..	..	..	..	..
Miscellaneous	..	53,920	325	14,125	68,370	..	..	..	..	..
Total ..	..	66,604	1,400	33,050	101,054	..	319,157	..	..	319,157
Total, South Canara ..	10,357	67,900	1,400	33,050	112,707	528,200	982,484	..	..	1,510,684
Malabar, North.										
Reserved forests—										
Teak (*Tectona grandis*) ..	23,663	24,386	..	..	48,049	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	6,466	8,842	..	..	15,308	..	..	..	..	..
Pterocarpus Marsupium ..	7,247	2,399	..	..	9,646	..	..	..	..	..
Lagerstrœmia microcarpa ..	7,658	1,512	..	..	9,170	..	..	..	..	..
Terminalia tomentosa ..	17,771	7,715	..	..	25,486	..	..	..	..	..
Miscellaneous	4,673	3,335	..	..	8,008	..	..	..	..	..
Total ..	67,478	48,189	..	..	115,667	11,901	12	..	..	11,913
Reserved lands—*Nil.*										
Unreserved lands—*Nil.*										
Total, Malabar, North ..	67,478	48,189	..	..	115,667	11,901	12	..	..	11,913
Malabar, South.										
Reserved forests—										
Teak (*Tectona grandis*) ..	13,565	..	.	..	13,565	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	166	..	..	..	166	..	..	..	..	..
Ironwood (*Xylia dolabriformis*).	3,526	..	..	..	3,526	..	..	..	..	..
Terminalia tomentosa	505	..	..	..	505	..	..	..	..	..
Miscellaneous	5,485	40	..	..	5,525	..	..	..	..	..
Total ..	23,247	40	..	..	23,287	141	231	..	..	372

District.	Total. Outturn.	Bamboos. Government. No.	Government. Value in Rs.	Purchasers. No.	Purchasers. Value in Rs.	Free-grantees. No.	Free-grantees. Value in Rs.	Right-holders. No.	Right-holders. Value in Rs.	Total. No.	Total. Value in Rs.
1	12	13		14		15		16		17	
SOUTHERN CIRCLE—*cont.*	C. FT.										
	tract.										
Reserved forests—											
Sandalwood (*Santalum album*).	..	..	..	..	..	..	..	..	..	..	..
Teak (*Tectona grandis*) ..	..	..	..	..	..	..	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	..	..	..	..	..	..	..	..	..	..	..
Pterocarpus Marsupium ..	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	..	..	..	..	..	..	..	..	..	..	..
Total S.C ..	4,377,646	1,979	199	12,250,243	80,258	16,020	143	..	..	12,268,242	80,600
Unreserved lands—											
Sandalwood (*Santalum album*).	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	..	..	..	..	..	..	..	..	..	..	..
Total S.C. ..	3,388,128	2,303	224	410,649	5,296	10,421	89	..	..	423,373	5,609
Total, Reserved forests and unreserved lands, S.C.	7,765,774	4,282	423	12,660,892	85,554	26,441	232	..	..	12,691,615	86,209
WESTERN CIRCLE.											
South Canara.											
Reserved forests—											
Teak (*Tectona grandis*) ..	..	..	..	..	..	..	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	..	..	..	..	..	..	..	..	..	..	..
Pterocarpus Marsupium ..	..	..	..	..	..	..	..	..	..	..	..
Ironwood (*Xylia dolabriformis*)	..	..	..	..	..	..	..	..	..	..	..
Hopea parviflora	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	..	..	..	..	..	..	..	..	..	..	..
Total ..	1,203,180	23,273	2,095	83,950	1,658	200	4	..	..	107,423	3,757
Reserved lands—*Nil.*											
Unreserved lands—											
Teak (*Tectona grandis*)	..	..	..	..	..	..	..	..	..	..	..
Sandalwood (*Santalum album*).	..	..	..	..	..	..	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	..	..	..	..	..	..	..	..	..	..	..
Pterocarpus Marsupium ..	..	..	..	..	..	..	..	..	..	..	..
Ironwood (*Xylia dolabriformis*).	..	..	..	..	..	..	..	..	..	..	..
Hopea parviflora	..	..	..	..	..	..	..	..	..	..	..
Ebony (*Diospyros Ebenum*) ..	..	..	..	..		..	..	..	..	..	..
Miscellaneous	..	..	..	..	..	..	..	..	..	..	..
Total ..	420,211	.	..	22,330	357	..	..	..	..	22,330	357
Total, South Canara ..	1,623,391	23,273	2,095	106,280	2,015	200	4		..	129,753	4,114
Malabar, North.											
Reserved forests—											
Teak (*Tectona grandis*) ..	..	..	..	..	..	..	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	..	..	..	..	..	..	..	..	..	..	..
Pterocarpus Marsupium ..	..	..	..	..	..	..	..	..	..	..	..
Lagerstrœmia microcarpa ..	..	..	..	..	..	..	..	..	..	..	..
Terminalia tomentosa ..	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	..	..	..	..	..	..	..	..	..	..	..
Total ..	127,580	20,745	1,035	22,443	336	5,000	50	..	..	48,188	1,421
Reserved lands—*Nil.*											
Unreserved lands—*Nil.*											
Total, Malabar, North ..	127,580	20,745	1,035	22,443	336	5,000	50	..	..	48,188	1,421
Malabar, South.											
Reserved forests—											
Teak (*Tectona grandis*) ..	..	..	..	..	..	..	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	..	..	..	..	..	..	..	..	..	..	..
Ironwood (*Xylia dolabriformis*).	..	..	..	..	..	..	..	..	..	..	..
Terminalia tomentosa	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	..	..	..	..	..	..	..	..	..	..	..
Total ..	23,659	25,718	1,543	22,200	484	..	..	..	..	47,918	2,027

Outturn (in cubic feet solid) of Timber, Fuel and Bamboos (in number) during the year 1912-13, and Agency of Exploitation—*cont.*

District.	Timber.					Fuel.					Total.	Bamboos.									
	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.	Government.	Purchasers.	Free-grantees.	Right-holders.	Total.	Outturn.	Government.		Purchasers.		Free-grantees.		Right-holders.		Total.	
												No.	Value in Rs.	No.	Value in Rs.	No.	Value in Rs.	No.	Value in Rs.	No.	Value in Rs.
1	2	3	4	5	6	7	8	9	10	11	12	13		14		15		16		17	
WESTERN CIRCLE—*cont.*	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.										
Malabar, South—cont.																					
Reserved lands—Miscellaneous	852	..	..	..	852	..	..	..	..	..	852	..	..	..	..	..	..	..	..	..	..
Unreserved lands—																					
Teak (*Tectona grandis*) ..	206	9	..	..	215	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	..	223	..	..	223	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	206	232	..	..	438	..	40	..	..	40	478	..	..	..	..	..	..	..	..	..	..
Leased forests—																					
Teak (*Tectona grandis*) ..	56,652	..	..	..	56,652	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ironwood (*Xylia dolabriformis*).	12	276	..	..	288	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Terminalia tomentosa	40	..	..	..	40	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	88	59	..	..	147	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	56,792	335	..		57,127	3,626	..		..	3,626	60,753	36,816	1,909	12,536	273	..	..	.	..	49,352	2,182
Total, Malabar, South ..	81,097	607	..	..	81,704	3,767	271	..	..	4,038	85,742	62,534	3,452	34,736	757	..	..	..	..	97,270	4,209
The Nilgiris.																					
Reserved forests—																					
Teak (*Tectona grandis*) ..	..	278	..	..	278	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pterocarpus Marsupium ..	..	95	..	..	95	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	..	27	..	..	27	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sandalwood (*Santalum album*) ..	276	..	..	..	276	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	..	8,566	200	..	8,766	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	276	8,966	200	..	9,442	349,299	2,223	975	..	352,497	361,939	..	..	334,271	2,973	1,610	15	..	..	335,881	2,988
Reserved lands—Miscellaneous	..	..	..	336	336	..	..	..	28	28	364	..	..	..	..	..	..	1,392	4	1,392	4
Unreserved lands—*Nil.*																					
Leased forests—																					
Teak (*Tectona grandis*) .	28,558	..	..	..	28,558	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pterocarpus Marsupium ..	1,440	..	..	..	1,440	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lagerstræmia microcarpa ..	425	..	..	..	425	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	633	..	..	..	633	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	97	1,352	117	..	1,566	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	31,153	1,352	117	..	32,622	..	..	..	..	..	32,622	..	..	1,981	20	2,235	22	..	..	4,216	42
Total, the Nilgiris ..	31,429	10,318	317	336	42,400	349,299	2,,223	975	28	352,525	394,925	..	.	336,252	2,993	3,845	37	1,392	4	341,489	3,034
Kollegal.																					
Reserved forests—																					
Teak (*Tectona grandis*) ..	53	..	..	..	53	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sandalwood (*Santalum album*) ..	1,358	..	..	..	1,358	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	2,129	..	..	..	2,129	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	3,540	..	..	..	3,540	318,240	1,710	..	..	319,950	323,490	98,081	2,139	139,864	515	..	..	..	..	237,945	2,654
Reserved lands—Sandalwood (*Santalum album*).	678	..	..	..	678	..	..	..	..	..	678	..	..	18,422	135	..	..	..	..	18,422	135
Unreserved lands—Miscellaneous	25	29,504	..	..	29,529	..	3,785	..	..	3,785	33,314	..	..	..	..	..	..	..	..	..	..
Total, Kollegal ..	4,243	29,504	..	..	33,747	318,240	5,495	..	..	323,735	357,482	98,081	2,139	158,286	650	..	..	..	..	256,367	2,789
Coimbatore, North.																					
Reserved forests—																					
Sandalwood (*Santalum album*) ..	3,348	..	..	..	3,348	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Teak (*Tectona grandis*) ..	35	..	..	..	35	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	285	..	..	..	285	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	7,511	494	..	..	8,005	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	11,179	494	..	..	11,673	652,789	764	..	.	653,553	665,226	1,865	25	3,500,418	6,866	..	..	..	..	3,502,283	6,891
Reserved lands—*Nil.*																					
Unreserved lands—Miscellaneous	..	10,301	137	..	10,438	..	10,191	..	..	10,191	20,629	..	..	..	..	..	..	..	..	..	..
Total, Coimbatore, North ..	11,179	10,795	137	..	22,111	652,789	10,955	..	..	663,744	685,855	1,865	25	3,500,418	6,866	..	..	..	..	3,502,283	6,891

Outturn (in cubic feet solid) of Timber, Fuel and Bamboo (in number) during the year 1912-13, and Agency of Exploitation—*cont.*

District.	Timber. Govern-ment.	Timber. Pur-chasers.	Timber. Free-grantees.	Timber. Right-holders.	Timber. Total.	Fuel. Govern-ment.	Fuel. Pur-chasers.	Fuel. Free-grantees.	Fuel. Right-holders.	Fuel. Total.
1	2	3	4	5	6	7	8	9	10	11
WESTERN CIRCLE—*cont.*	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.	C. FT.
Coimbatore, Central.										
Reserved forests—										
Teak (*Tectona grandis*)	97	..	..	..	97	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	84	..	..	..	84	..	..	..	..	..
Pterocarpus Marsupium ..	467	..	..	..	467	..	..	..	..	..
Terminalia tomentosa	10	..	..	..	10	..	..	..	..	..
Miscellaneous	98	19,012	..	..	19,110	..	..	..	..	..
Total ..	756	19,012	..	..	19,768	109,677	756,521	..	..	866,198
Reserved lands—*Nil.*										
Unreserved lands—										
Miscellaneous	..	108,973	4,048	..	113,021	..	123,179	..		123,179
Total, Coimbatore, Central ..	756	127,985	4,048	..	132,789	109,677	879,700	..	..	989,377
Coimbatore, South.										
Reserved forests—										
Teak (*Tectona grandis*) ..	24,539	..	..	..	24,539	..	..	..	..	..
Ironwood (*Xylia dolabriformis*).	813	..	..	..	813	..	..	..	.	..
Pterocarpus Marsupium ..	3,812	..	..	..	3,812	..	..			..
Rosewood (*Dalbergia latifolia*).	12,081	..	..	..	12,081	..	..	..	..	..
Terminalia tomentosa	10,430	..	..	..	10,430	..	..	..	..	..
Lagerstrœmia microcarpa ..	4,161	..	..	..	4,161	..	..	..	..	..
Miscellaneous	24,552	5,370	..	..	29,922	..		..	..	..
Total ..	80,388	5,370	..	..	85,758	97,800	187,380	..	..	285,180
Reserved lands—*Nil.*										
Unreserved lands—										
Miscellaneous	..	120	160	..	280	..	..	..	..	..
Total, Coimbatore, South ..	80,388	5,490	160	..	86,038	97,800	187,380	..	..	285,180
Abstract.										
Reserved forests—										
Teak (*Tectona grandis*) ..	62,618	24,664	..	..	87,282	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	19,391	8,969	..	..	28,360	..	..	..	..	..
Sandalwood (*Santalum album*).	4,982	..	..	..	4,982	..	..	..	..	..
Ironwood (*Xylia dolabriformis*).	6,258	..	..	..	6,258	..	..	..	..	..
Pterocarpus Marsupium ..	11,632	2,494	..	..	14,126	..	..	..	..	..
Terminalia tomentosa	28,716	7,715	..	..	36,431	..	..	..	..	..
Lagerstrœmia microcarpa ..	11,819	1,512	..	..	13,331	..	..	..	..	..
Hopea parviflora	122	400	..	..	522	..	..	..	..	..
Miscellaneous	51,683	37,613	200	..	89,496	..	..	..	..	..
Total W. C. ..	197,221	83,367	200	..	280,788	2,068,047	1,612,168	975	..	3,681,190
Reserved lands—										
Sandalwood (*Santalum album*).	678	..	..	..	678	..	..	..	..	..
Miscellaneous	852	..	..	336	1,188	..	..	..	..	..
Total W. C. ..	1,530	..	..	336	1,866	..	..	..	28	28
Unreserved lands—										
Teak (*Tectona grandis*) ..	206	1,159	..	1,300	2,665	..	..	..	.	..
Rosewood (*Dalbergia latifolia*).	..	1,254	75	425	1,754	..	..	..	..	..
Pterocarpus Marsupium	..	125	..	425	550	..	..	..	..	..
Ironwood (*Xylia dolabriformis*).	..	915	..	625	1,540	..	..	..	..	..
Hopea parviflora	..	6,847	1,000	16,150	23,997	..	..	..	..	..
Sandalwood (*Santalum album*).	..	218	..	.	218	..	..	..	..	..
Ebony (*Diospyros Ebenum*) ..	..	2,175	..	..	2,175	..	..	..	..	..
Miscellaneous	25	203,041	4,670	14 125	221,861	..	..	..	..	..
Total W. C. ..	231	215,734	5,745	33,050	254,760	..	456,352	..	..	456,352

District.	Total. Outturn.	Bamboos. Government. Number.	Government. Value in Rs.	Purchasers. Number.	Purchasers. Value in Rs.	Free-grantees. Number.	Free-grantees. Value in Rs.	Right-holders. Number.	Right-holders. Value in Rs.	Total. Number.	Total. Value in Rs.
1	12	13		14		15		16		17	
WESTERN CIRCLE—*cont.*	C. FT.										
Coimbatore, Central.											
Reserved forests—											
Teak (*Tectona grandis*)	..	..	..	..	..	..	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	..	..	..	..	..	..	..	..	..	..	..
Pterocarpus Marsupium	..	..	..	..	..	..	..	..	..	..	..
Terminalia tomentosa	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	..	..	..	..	..	..	..	..	..	..	..
Total	885,966	300	11	467,298	11,682	..	..	..	..	467,598	11,693
Reserved lands—*Nil.*											
Unreserved lands— Miscellaneous	236,200	..	..	..	..	..	..	..	..	..	..
Total, Coimbatore, Central	1,122,166	300	11	467,298	11,682	..	..	..	..	467,598	11,693
Coimbatore, South.											
Reserved forests—											
Teak (*Tectona grandis*)	..	..	..	..	..	..	..	..	..	..	..
Ironwood (*Xylia dolabriformis*).	..	..	..	..	..	..	..	..	..	..	..
Pterocarpus Marsupium	..	..	..		..	..	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	..	..	..	..	..	..	..	..	..	..	..
Terminalia tomentosa	..	..	..	..	..	..	..	..	..	..	..
Lagerstrœmia microcarpa	..	..	..	..	..	..	..	..	..	.	..
Miscellaneous	..	..	..	..	..	..	..	..	..	..	..
Total	370,938	111	10	193,125	1,385	..	..	..	..	193,236	1,395
Reserved lands—*Nil.*											
Unreserved lands— Miscellaneous	280	..	..	..	..	..	..	..	..	..	..
Total, Coimbatore, South	371,218	111	10	193,125	1,385	..	..	..	..	193,236	1,395
Abstract.											
Reserved forests—											
Teak (*Tectona grandis*)	..	..	..	..	..	..	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	..	..	..	..	..	..	..	..	..	..	..
Sandalwood (*Santalum album*).	..	..	..	..	..	..	..	..	..	..	..
Ironwood (*Xylia dolabriformis*).	..	..	..	..	..	..	..	..	..	..	..
Pterocarpus Marsupium	..	..	..	..	..	..	..	..	..	..	..
Terminalia tomentosa	..	..	..	..	..	..	..	..	..	..	..
Lagerstrœmia microcarpa	..	..	..	..	..	..	..	..	..	..	..
Hopea parviflora	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	..	..	..	..	..	..	..	..	..	..	..
Total W. C.	3,961,978	170,093	6,858	4,763,569	25,899	6,810	69	..	..	4,940,472	32,826
Reserved lands—											
Sandalwood (*Santalum album*).	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	..	..	..	..	..	..	..	..	..	..	..
Total W. C.	1,894	..	..	18,422	135	..	..	1,392	4	19,814	139
Unreserved lands—											
Teak (*Tectona grandis*)	..	..	..	..	..	..	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	..	..	..	..	..	..	..	..	..	..	..
Pterocarpus Marsupium	..	..	..	..	..	..	..	..	..	..	..
Ironwood (*Xylia dolabriformis*).	..	..	..	..	..	..	..	..	..	..	..
Hopea parviflora	..	..	..	..	..	..	..	..	..	..	..
Sandalwood (*Santalum album*).	..	..	..	..	..	..	..	..	..	..	..
Ebony (*Diospyros Ebenum*)	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	..	..	..	..	..	..	..	..	..	..	..
Total W. C.	711,112	..	..	22,330	357	..	..	..	..	22,330	357

Outturn (in cubic feet solid) of Timber, Fuel and Bamboos (in number) during the year 1912–13, and Agency of Exploitation—*cont.*

District.	Timber. Govern-ment.	Timber. Purchasers.	Timber. Free-grantees.	Timber. Right-holders.	Timber. Total.	Fuel. Govern-ment.	Fuel. Purcha-sers.	Fuel. Free-grantees.	Fuel. Right-holders.	Fuel. Total.
1	2	3	4	5	6	7	8	9	10	11
	C. FT.	C. FT.	C. FT.	C.FT.	C. FT.	C. FT.	C. FT.	C. FT,	C.FT.	FT.
Leased forests—										*Abs*
Teak (*Teciona grandis*)	85,210	..	..	..	85,210	..	..	..	..	..
Rosewood (*Dalborgia latifolia*),	633	..	..	..	633	..	..	..	..	..
Ironwood (*Xylia dolabriformis*).	12	276	..	..	288	..	..	..	..	..
Terminalia tomentosa	40	..	..	..	40	..	..	..	..	..
Pterocarpus Marsupium	1,440	..	..	..	1,440	..	..	..	..	..
Lagerstrœmia microcarpa ..	425	..	..	..	425	..	..	..	..	..
Miscellaneous	185	1,411	117	..	1,713	..	..	..	..	..
Total W.C. ..	87,945	1,687	117	..	89,749	3,626	..	..	..	3,626
Reserved forests, reserved lands, unreserved lands and leased forests—										
Teak (*Tectona grandis*)	148,034	25"823	..	1,300	175,157	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	20,024	10,223	75	425	30,747	..	..	..	..	..
Sandalwood (*Santalum album*).	5,660	218	..	..	5,878	..	..	..	..	..
Ironwood (*Xylia dolabriformis*).	6,270	1,191	..	625	8,086	..	..	..	..	..
Pterocarpus Marsupium ..	13,072	2,619	..	425	16,116	..	..	..	..	..
Terminalia tomentosa	28,756	7,715	..	..	36,471	..	..	..	..	..
Lagerstrœmia microcarpa ..	12,244	1,512	..	..	13,756	..	..	..	..	..
Hopea parviflora	122	7,247	1,000	16,150	24,519	..	..	..	..	..
Ebony (*Diospyros Ebenum*) ..	..	2,175	..	..	2,175	..	..	..	..	..
Miscellaneous	52,745	242,065	4,987	14,461	314,258	..	..	..	..	..
Grand Total W.C. ..	286,927	300,788	6,062	33,386	627,163	2,071,673	2,068,520	975	28	4,141,196
Total, Presidency, Reserved forests, Reserved lands and Unreserved lands—										
Red Sanders (*Pterocarpus marsupium*).	1,030	..	..	..	1,030	..	..	..	..	..
Sandalwood (*Santalum album*)	14,431	218	..	..	14,649	..	..	..	..	..
Rosewood (*Dalbergia latifolia*).	20,095	10,223	75	425	30,818	..	..	..	..	..
Ironwood (*Xylia dolabriformis*).	6,270	1,191	..	625	8,086	..	..	..	..	..
Lagerstroemia microcarpa ..	12,244	1,512	..	..	13,756	..	..	..	..	..
Hopea parviflora	122	7,247	1,000	16,150	24,519	..	..	..	..	..
Ebony (*Diospyros Ebenum*) ..	..	2,175	..	..	2,175	..	..	..	..	..
Sal (*Shorea robusta*) ..	26,129	68,301	..	..	94,430	..	..	..	..	..
Teak (*Tectona grandis*) ..	161,763	113,100	..	1,300	276,163	..	..	..	..	..
Yegisi (*Pterocarpus marsupium*).	32,194	36,035	50	425	68,704	..	..	..	..	..
Yepi (*Hardwickia binata*) ..	470	1	..	..	471	..	..	..	..	..
Maddi (*Terminalia tomentosa*).	42,928	56,735	461	..	100,124	..	..	..	..	..
Miscellaneous	392,563	3,632,003	117,512	15,268	4,157,346	..	..	..	..	..
Grand Total, Presidency, Reserved forests, Reserved lands and Unreserved lands.	710,239	3,928,741	119,098	34,193	4,792,271	5,303,751	15,521,027	105,296	154,854	21,084,928

District.	Total. Outturn.	Bamboos. Government. Number.	Government. Value in Rs.	Purchasers. Number.	Purchasers. Value in Rs	Free-grantees. Number.	Free-grantees. Value. in Rs	Right-holders. Number.	Right-holders. Value in Rs.	Total. Number.	Total. Value in Rs.
1	12	13		14		15		16		17	
	FT.										
Leased forests—	*tract.*										
Teak (*Teciona grandis*)	..	..	..	..	..	..	..	..	..	..	..
Rosewood (*Dalborgia latifolia*)	..	..	..	..	..	..	..	..	..	..	..
Ironwood (*Xylia dolabriformis*)	..	..	..	..	..	..	..	..	..	..	..
Terminalia tomentosa	..	..	..	..	..	..	..	..	..	..	..
Pterocarpus Marsupium	..	..	..	..	..	..	..	..	..	..	..
Lagerstrœmia microcarpa	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	..	..	..	..	..	..	..	..	..	..	..
Total W.C.	93,375	36,816	1,909	14,517	293	2,235	22	..	..	53,568	2,224
Reserved forests, reserved lands, unreserved lands and leased forests—											
Teak (*Tectona grandis*)	..	..	..	..	..	..	..	..	..	..	..
Rosewood (*Dalbergia latifolia*)	..	..	..	..	..	..	..	..	..	..	..
Sandalwood (*Santalum album*)	..	..	..	..	..	..	..	..	..	..	..
Ironwood (*Xylia dolabriformis*)	..	..	..	..	..	..	..	..	..	..	..
Pterocarpus Marsupium	..	..	..	..	..	..	..	..	..	..	..
Terminalia tomentosa	..	..	..	..	..	..	..	..	..	..	..
Lagerstrœmia microcarpa	..	..	..	..	..	..	..	..	..	..	..
Hopea parviflora	..	..	..	..	..	..	..	..	..	..	..
Ebony (*Diospyros Ebenum*)	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	..	..	..	..	..	..	..	..	..	..	..
Grand Total W.C.	4,768,359	206,909	8,767	4,818,838	26,684	9,045	91	1,392	4	5,036,184	35,546
Total, Presidency, Reserved forests, Reserved lands and Unreserved lands—											
Red Sanders (*Pterocarpus marsupium*)	..	..	..	..	..	..	..	..	..	..	..
Sandalwood (*Santalum album*)	..	..	..	..	..	..	..	..	..	..	..
Rosewood (*Dalbergia latifolia*)	..	..	..	..	..	..	..	..	..	..	..
Ironwood (*Xylia dolabriformis*)	..	..	..	..	..	..	..	..	..	..	..
Lagerstroemia microcarpa	..	..	..	..	..	..	..	..	..	..	..
Hopea parviflora	..	..	..	..	..	..	..	..	..	..	..
Ebony (*Diospyros Ebenum*)	..	..	..	..	..	..	..	..	..	..	..
Sal (*Shorea robusta*)	..	..	..	..	..	..	..	..	..	..	..
Teak (*Tectona grandis*)	..	..	..	..	..	..	..	..	..	..	..
Yegisi (*Pterocarpus marsupium*)	..	..	..	..	..	..	..	..	..	..	..
Yepi (*Hardwickia binata*)	..	..	..	..	..	..	..	..	..	..	..
Maddi (*Terminalia tomentosa*)	..	..	..	..	..	..	..	..	..	..	..
Miscellaneous	..	..	..	..	..	..	..	..	..	..	..
Grand Total, Presidency, Reserved forests, Reserved lands and Unreserved lands.	25,877,199	4,346,266	55,252	29,829,766	195,724	108,106	1,010	13,685	65	34,297,823	252,051

ANNUAL FORM No. 77.

Forest Department, Madras Presidency.

OUTTURN of Minor Forest Produce during the year 1912–13.

Circles.	Description of produce.	Produce removed or utilized. By Government Agency. Quantity.	By Government Agency. Value.	By purchasers. Value.	By free grantees. Value.	By right-holders. Value.	Total Value.
1	2	3	4	5	6	7	8
		MDS.	RS.	RS.	RS.	RS.	RS.
Northern Circle	Grazing and fodder grass	..	..	(b)1,28,898	5	798	(b)1,29,701
	Grass (thatch, korai, tharbi, etc.).	62,824	620	304	37	..	961
	Tamarind, soapnuts, galnuts, nux-vomica, sheakoy, etc.	2,365	447	32,668	..	..	33,115
	Horns, honey, wax, resin, gum, skins, etc.	253	92	1,079	..	..	1,171
	Tangedu, etc., barks and fibres.	..	..	24,905	2	..	24,907
	Stone, gravel, earth, etc. ..	11,816	109	3,133	..	..	3,242
	Leaves for platters	..	..	589	..	..	589
	Date and palmyra leaves, stalks, etc.	..	..	..	18	..	18
	Manure leaves	..	..	9	..	..	9
	Miscellaneous	18,556	9,360	52,129	45	22,784	(a) 84,318
	Total ..	95,814	10,628	2,43,714	107	23,582	2,78,031
Central Circle	Grazing and fodder grass ..	21,396	4,873	2,60,729	1,327	..	2,66,929
	Grass (thatch) and korai, etc. ..	3,348	50	1,200	33	151	1,434
	Tamarind, soapnuts and gallnuts.	6,984	5,816	22,456	..	..	28,272
	Horns, honey, wax, gums, etc.	126	618	2,140	..	..	2,758
	Tangedu, vembadam, etc. ..	243	429	5,04,108	..	..	5,04,537
	Mica stone, gravel, etc. ..	..	..	40,692	..	..	40,692
	Manure leaves, thorns, etc. ..	..	..	7,416	4	..	7,420
	Date, palmyra leaves, etc. ..	2,776	54	2,888	423	..	3,365
	Miscellaneous including tree-tapping and tree-owners' fees.	21,228	6,196	1,00,125	49	..	1,06,370
	Total ..	56,101	18,036	9,41,754	1,836	151	9,61,777
Southern Circle	Grazing and fodder grass ..	3,296	375	2,18,586	* 7,965	..	2,26,926
	Grass (thatch, korai, etc.) ..	..	..	5,864	27	80	5,971
	Tamarind, soapnuts, gallnuts, etc.	..	..	36,180	..	..	36,180
	Horns, honey, wax, gum, etc. ..	8	22	1,007	..	..	1,029
	Avaram, vembadam, etc., barks.	..	..	23,496	..	..	23,496
	Stones, gravel and earth ..	..	..	29,013	..	..	29,013
	Manure leaves, thorns, etc. ..	..	..	32,523	2,251	..	34,774
	Date, palmyra leaves, etc. ..	..	..	1,328	73	..	1,401
	Miscellaneous including tree tapping fees	114	36	1,59,874	..	740	1,60,650
	Total ..	3,418	433	5,07,871	10,316	820	5,19,440
	Reserved forests.						
Western Circle	Grass and grazing	1,802	50	48,218	..	..	48,268
	Grass (thatch, korai, etc.) ..	60	1	607	..	..	608
	Dammer, turmeric, pepper, cardamoms, etc.	2	3	5,365	..	..	5,368
	Tamarind, soapnuts, gallnuts, nux-vomica, sheakoy, etc.	6,872	6,960	4,188	..	..	11,148
	Horns, honey, wax, gum, resin, skins, etc.	393	3,915	731	..	..	4,646
	Avaram, vembadam, etc., barks and fibres.	231	58	2,165	..	..	2,223
	Stones, gravel, earth, etc. ..	..	..	1,180	..	..	1,180
	Manure leaves, thorns, etc. ..	..	..	142	..	..	142
	Date and palmyra leaves ..	8	13	166	..	..	179
	Miscellaneous	270	344	1,827	..	..	2,171
	Total ..	9,638	11,344	64,589	..	..	75,933

* Free grazing, Rs. 465 ; free removal of grass, Rs. 7,500.

(a) Corrected in the Board's office.

(b) Excludes Rs. 8,245-12-3 being value of produce removed by purchasers in the Parlakimedi maliahs.

Outturn of Minor Forest Produce during the year 1912-13—*cont.*

Circles.	Description of produce.	Produce removed or utilized. By Government Agency. Quantity.	By Government Agency. Value.	By purchasers. Value.	By free-grantees. Value.	By right-holders. Value.	Total. Value.
1	2	3	4	5	6	7	8
		MDS.	RS.	RS	RS.	RS.	RS.
Western Circle—*cont.*	*Reserved lands.*						
	Grass and grazing	..	..	5,962	..	702	6,664
	Grass (thatch, korai, etc.) ..	..	..	12	..	16	28
	Dammer, turmeric, pepper, cardamoms, etc.	..	..	472	..	..	472
	Tamarind, soapnuts, gallnuts, nux-vomica, sheakoy, etc.	759	880	18	..	..	898
	Horns, honey, wax, gum, resin, skins, etc.	40	259	1	..	..	260
	Stones, gravel, earth, etc. ..	..	..	..	..	..	..
	Miscellaneous	..	..	..	..	3	3
	Total ..	799	1,139	6,465	..	721	8,325
	Leased forests.						
	Grass (thatch, korai), etc. ..	..	..	20	..	..	20
	Horns, honey, wax, gum, resin, skins, etc.	..	..	24	..	..	24
	Stones, gravel, earth, etc. .	6	33	..	..	..	33
	Total ..	6	33	44	..	..	77
	Unreserved lands.						
	Catechu	1,242	13,131	..	..	..	13,131
	Tamarind, soapnuts, gallnuts, nux-vomica, sheakoy, etc.	..	..	6,315	..	..	6,315
	Avaram, vembadam, etc., barks and fibres.	..	..	1,461	..	..	1,461
	Stones, gravel, earth, etc. ..	..	..	1,616	416	..	2,032
	Date and palmyra leaves ..	..	..	300	1	..	301
	Manure leaves, thorns, etc. ..	..	..	19	..	..	19
	Miscellaneous	..	..	5,416	..	..	5,416
	Total ..	1,242	13,131	15,127	417	..	28,675
	Grand total, W.C. ..	11,685	25,647	86,225	417	721	1,13,010
Total, Presidency.	Grass and grazing	26,494	5,298	6,62,393	9,297	1,500	6,78,488
	Grass (thatch, korai, etc.) ..	66,232	671	8,907	97	247	9,022
	Tamarind, soapnuts, gallnuts, etc.	16,980	14,103	1,01,825	..	..	1,15,928
	Horns, honey, wax, etc. ..	820	4,906	4,982	..	..	9,888
	Tangedu barks, fibres, etc. ..	474	487	5,56,135	2	..	5,56,624
	Stone, gravel	11,822	142	75,634	416	..	76,192
	Dammer, etc.	2	3	5,837	..	..	5,840
	Catechu	1,242	13,131	..	..	..	13,131
	Leaves for platters	..	..	589	..	..	589
	Manure leaves, etc.	..	..	40,109	2,255	..	42,364
	Date and palmyra leaves ..	2,784	67	4,682	515	..	5,264
	Miscellaneous	40,168	15,936	3,19,371	94	23,527	3,58,928
	Grand Total, Presidency ..	167,018	54,744	17,79,564	12,676	25,274	18,72,258

ANNUAL FORM No. 78.

Forest Department, Madras Presidency.

ACCOUNT of timber and other produce cut or collected by Government Agency and brought to depot, sold locally or otherwise disposed of during 1912–13.

District.	Balance at commencement of the year in forest and sale depots.	Received during the year.	Total.	Disposed of during the year.	Balance in hand at close of the year in forest and sale depots.
1	2	3	4	5	6
		TIMBER (CUBIC FEET).			
Northern Circle.					
Ganjām	(*f*) 38,304	40,263	(*f*) 78,567	(*g*) 65,732	(*h*) 12,835
Vizagapatam	9,595	2,007	11,602	10,209	1,393
Gōdāvari, Upper	28,811	8,454	37,265	20,094	17,171
Do. Lower	20,867	8,643	29,510	29,508	2
Kistna	314	3,389	3,703	3,703	..
Kurnool, East	7,972	17,166	25,138	24,292	846
Do. South	32,915	39,287	72,202	58,460	13,742
Do. West	26,317	204,557	230,874	203,464	27,410
Total ..	165,095	323,766	488,861	415,462	73,399
Central Circle.					
Bellary	826	4,935	5,761	4,653	1,108
Anantapur	308	320	628	628	..
Guntūr	3,799	18,828	22,627	18,471	4,156
Cuddapah, North	5,737	5,209	10,946	9,233	1,713
Do. East	4,624	34,013	38,637	31,555	7,082
Nellore	99	913	1,012	667	345
Chingleput	76	4	80	80	..
Chittoor	45	2,789	2,834	2,768	66
Total ..	15,514	67,011	82,525	68,055	14,470
Southern Circle.					
Vellore, North	1,311	27	1,338	1,331	7
Do. South	6,915	7,777	14,692	8,707	5,985
Arcot, South	959	343	1,302	1,302	..
Salem, North	2,276	5,888	8,164	6,924	1,240
Do. South	514 * + 5	1,368	1,887	1,602	285
Trichinopoly	223	564	787	774	13
Madura	12	4,056	4,068	4,041	27
Tinnevelly	2,309	12,512	14,821	9,872	4,949
Total ..	14,524	32,535	47,059	34,553	12,506
Western Circle.					
Canara, South	10,647	10,357	21,004	12,176 (*a*) 435 (*b*) 27	8,366
Malabar, North	17,984	67,478	85,462	54,916 (*a*) 1,053 (*b*) 3,677 (*c*) 975	24,841
Do. South	117,657	81,097	198,754	106,149 (*a*) 2,436 (*b*) 14,304 (*d*) 619	75,246
Nilgiris, The	19,229	31,429	50,658	20,937 (*b*) 56	29,665
Kollegal	1,179	4,243 (*c*) 975	6,397	4,499 (*b*) 31	1,867
Coimbatore, North	6,189	11,179	17,368	11,906 (*b*) 286	5,176
Do. Central	239	756	995	402 (*b*) 150	443
Do. South	246,140	80,388 (*d*) 619 (*f*) 131	327,278	47,082 (*a*) 1,256 (*b*) 4,575	274,365
Total ..	419,264	288,652	707,916	287,947	419,969
Grand Total, Presidency ..	6,14,397	711,964	1,326,361	806,017	520,344

* Omitted to be shown in the last year's return.

(*a*) Used departmentally.
(*b*) Written off the accounts.
(*c*) Transferred from North Malabar to Kollegal.
(*d*) Transferred from South Malabar to South Coimbatore.
(*e*) Excess as per remeasurement.
(*f*) Excludes 10,848 cubic feet belonging to the Parlakimedi maliahs.
(*g*) Do. 4,915 do. do. do.
(*h*) Do. 5,933 do. do. do.

Account of timber and other produce cut or collected by Government Agency and brought to depot, sold locally or otherwise disposed of during 1912–13—*cont.*

District.	Balance at commencement of the year in forest and sale depots.	Received during the year.	Total.	Disposed of during the year.	Balance in hand at close of the year in forest and sale depots.
1	2	3	4	5	6
FUEL (CUBIC FEET).					
Northern Circle.					
Ganjām	9,524	40,574	50,098	49,098	1,000
Vizagapatam	729	69,210	69,939	69,197	742
Gōdāvari, Upper	21,582	2,144	23,726	20,655	3,071
Do. Lower	202,392	157,975	360,367	337,544	22,823
Kistna	63,304	80,503	143,807	139,007	4,800
Kurnool, East	11,862	2,800	14,662	14,402	260
Do. South	370,387	648,027	1,018,414	817,738	200,676
Do. West	378,329	458,911	837,240	746,749	90,491
Total ..	1,058,109	1,460,144	2,518,253	2,194,390	323,863
Central Circle.					
Bellary	9,250	15,123	24,383	18,410	5,973
Anantapur	200,396	43,960	244,356	244,356	..
Guntūr	83,635	693,350	776,985	651,345	125,640
Cuddapah, North	32,922	59,700	92,622	80,722	11,900
Do. East	76,421	293,100	369,521	268,616	100,905
Nellore	40,169	27,052	67,221	49,571	17,650
Chingleput	418	1,745	2,163	1,143	1,020
Chittoor	..	283,846	283,846	281,470	2,376
Total ..	443,211	1,417,886	1,861,097	1,595,633	265,464
Southern Circle.					
Vellore, North	23,753	5,304	29,057	5,812	23,245
Do. South	64,759	480	65,239	62,723	2,516
Arcot, South	20,583	204,705	225,288	225,268	20
Salem, North	1,144	1,904	3,048	3,048	..
Do. South	1,665	3,460	5,125	5,125	..
Trichinopoly	12,143	93,705	105,848	102,998	2,850
Madura	..	36,004	36,004	35,904	100
Tinnevelly	60	8,486	8,546	1,628	6,918
Total ..	124,107	354,018	478,155	442,506	35,649
Western Circle.					
Canara, South	276,563	528,200	804,763	515,964 (*a*) 297 (*b*) 2,850	285,652
Malabar, North	11,480	11,901	23,381	19,220 (*a*) 22	4,139
Do. South	128	3,767	3,895	3,761 (*b*) 134	..
Nilgiris, The	231,419	349,299	580,718	370,477 (*b*) 720	209,521
Kollegal	239,775	318,240	558,015	261,136	296,879
Coimbatore, North	76,360	652,789	729,149	631,149	98,000
Do. Central	8,223	109,677	117,900	53,654 (*b*) 2,396	61,850
Do. South	53,031	97,800	150,831	120,531	30,300
Total ..	896,979	2,071,673	2,968,652	1,982,311	986,341
Grand Total, Presidency ..	2,522,406	5,303,751	7,826,157	6,214,840	1,611,317

(*a*) Used departmentally. (*b*) Written off the account.

Account of timber and other produce cut or collected by Government Agency and brought to depot, sold locally or otherwise disposed of during 1912–13—*cont.*

District.	Balance at commencement of the year in forest and sale depots.	Received during the year.	Total.	Disposed of during the year.	Balance in hand at close of the year in forest and sale depots.
1	2	3	4	5	6
		BAMBOOS (NUMBER).			
Northern Circle.					
Ganjām	11,850	595,873	607,723	599,724	7,999
Vizagapatam	1,310	834,477	835,787	834,717	1,070
Gōdāvari, Upper	2,425	1,000	3,425	3,000	425
Do. Lower		13,604	13,604	13,604	..
Kistna	4,550	29,075	33,625	33,625	..
Kurnool, East	..	726	726	626	100
Do. South	3,260	204,364	207,624	187,486	20,138
Do. West	501	2,367,618	2,368,119	2,368,119	..
Total	23,896	4,046,737	4,070,633	4,040,901	29,732
Central Circle.					
Bellary	..	6,800	6,800	6,650	150
Anantapur	13,586	3,925	17,511	17,511	..
Guntūr	..	..	..	..	..
Cuddapah, North	155	380	535	535	..
Do. East	..	440	440	440	..
Nellore	..	12	12	..	12
Chingleput	..	..	..	..	..
Chittoor	62	76,781	76,843	76,843	..
Total	13,803	88,338	102,141	101,979	162
Southern Circle.					
Vellore, North	..	..	..	..	..
Do. South	..	..	..	..	..
Arcot, South	650	1,440	2,090	2,090	..
Salem, North	24,078	2,085	26,163	26,163	..
Do. South	..	380	380	380	..
Trichinopoly	3,017	23	3,040	3,040	..
Madura	..	287	287	287	..
Tinnevelly	..	67	67	67	..
Total	27,745	4,282	32,027	32,027	..
Western Circle.					
Canara, South	8,679	23,273	31,952	24,954 (*a*) 525 (*b*) 633	5,840
Malabar, North	1,057	20,745	21,802	16,375	5,427
Do. South	27,367	62,534	89,901	63,957 (*a*) 3,908 (*b*) 4,101	17,935
Kollegal	5,584	98,081	103,665	91,111	12,554
Coimbatore, North	..	1,865	1,865	1,865	..
Do. Central	..	300	300	300	..
Do. South	..	111	111	111	..
Total	42,687	206,909	249,596	207,840	41,756
Grand Total, Presidency	108,131	4,346,266	4,454,397	4,382,747	71,650

(*a*) Used departmentally. (*b*) Written off the accounts.

Account of timber and other produce cut or collected by Government Agency and brought to depot, sold locally or otherwise disposed of during 1912-13—*cont.*

District.	Balance at commencement of the year in forest and sale depots.	Received during the year.	Total.	Disposed of during the year.	Balance on hand at close of the year in forest and sale depots.
1	2	3	4	5	6
MINOR PRODUCE (MAUNDS OF 28 LBS.).					
Northern Circle.					
Ganjām	..	151	151	80	71
Vizagapatam	..	20,521	20,521	13,957	6,564
Gōdāvari, Upper	27,579	12,384	39,963	903	39,060
Do. Lower	12,000	41,676	53,676	53,676	..
Kistna	6,167	12,800	18,967	18,915	52
Kurnool, East	3,761	3,737	7,498	5,093	2,405
Do. South	157	898	1,055	422	633
Do. West	1,112	3,647	4,759	4,189	570
Total ..	50,776	95,814	146,590	97,235	49,355
Central Circle.					
Bellary	13	1,536	1,549	1,449	100
Anantapur	206	27	233	201	32
Guntūr	* 24,444	18,884	43,328	30,077	13,251
Cuddapah, North	635	1,870	2,505	2,190	315
Do. East	* 1,347	23,264	24,611	20,046	4,565
Nellore	* 3,570	10,043	13,613	11,419	2,194
Chingleput	3,494	34	3,528	1,138	2,390
Chittoor	416	443	859	859	..
Total ..	34,125	56,101	90,226	67,379	22,847
Southern Circle.					
Vellore, North	580	..	580	..	580
Do. South	320	120	440	440	..
Arcot, South	16	101	117	117	..
Salem, North	449	2,836	3,285	3,245	40
Do. South	203	340	543	203	340
Trichinopoly	178	13	191	191	..
Madura	..	..	..	..	..
Tinnevelly	52	8	60	3	57
Total ..	1,798	3,418	5,216	4,199	1,017
Western Circle.					
Canara, South	711	3,074	3,785	2,091 (a) 1,600 (b) 91	3
Malabar, North	(c)	2	2	2	(c)
Do. South	3	(c)	3	3	(c)
Nilgiris, The	777	17	794	790	4
Kollegal	917	1,896	2,813	2,604 (b) 18	191
Coimbatore, North	79	5,253	5,332	5,061 (b) 29	242
Do. Central	40	237	277	208 (b) 42	27
Do. South	54	1,206	1,260	964 (a) 60	236
Total ..	2,581	11,685	14,266	13,563	703
Grand Total, Presidency ..	89,280	167,018	2,56,298	182,376	73,922

* Revised figure.

(*a*) Used departmentally. (*b*) Written off the accounts. (*c*) Less than one quarter.

ANNUAL FORM NO. 79.

Forest Department, Madras Presidency.

STATEMENT showing the value of Timber and other Produce at Sale depots for 1912–13.

District.	Description of timber or produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.	
		Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favour of the year.	Against the year.
1	2	3	4	5	6	7	8	9	10
	Northern Circle.			RS.			RS.	RS.	RS.
Ganjām	Timber	..	(b)38,175	(c) 28, 55	..	12,835	8,259	..	19,996
	Fuel	..	7,092	184	..	1,000	26	..	158
	Bamboos	(d)11,850	..	(e)200	7,999	..	117	..	83
	Minor produce	..	..	..	MDS 71	..	1,052	1,052	..
Vizagapatam.	Timber	..	9,595	207	..	1,393	186	..	21
	Fuel	..	729	54	..	742	67	15	..
	Bamboos	1,310	..	13	1,070	..	12	..	1
	Minor produce	..	..	..	MDS. 6,564	..	112	112	..
Gōdāvari, Upper. (a)	....	..	..	..	..	..	..	..	..
Gōdāvari, Lower.	Timber	..	1,705	42	..	..	..	..	42
	Fuel	..	56,240	3,125	..	..	..	..	3,125
	Bamboos	..	..	..	..	..	..	..	..
	Minor produce	..	..	..	..	..	..	..	..
Kistna	Timber	..	314	103	..	..	..	..	103
	Fuel	..	63,304	1,238	..	..	..	..	1,238
	Bamboos	4,550	..	37	..	..	..	..	37
	Minor produce	MDS. 6,167	..	64	..	..	..	..	64
Kurnool, East.	Timber	..	7,972	3,986	..	846	823	..	3,163
	Fuel	..	11,862	245	..	260	6	..	239
	Bamboos	..	..	..	100	..	1	1	..
	Minor produce	MDS. 3,761	..	1,254	MDS. 2,405	..	802	..	452
Kurnool, South.	Timber	..	32,915	27,590	..	13,742	10,306	..	17,284
	Fuel	..	370,387	15,432	..	200,676	7,595	..	7,837
	Bamboos	3,260	..	99	20,138	..	463	364	..
	Minor produce	157	..	105	633	..	715	610	..
Kurnool, West.	Timber	..	26,317	13,158	..	..	..	..	13,158
	Fuel	..	378,329	23,645	..	..	..	..	23,645
	Bamboos	501	..	5	..	..	..	..	5
	Minor produce	MDS. 1,112	..	1,529	..	..	..	..	1,529
	Central Circle.								
Bellary	Timber	..	826	2,520	..	..	..	..	2,520
	Fuel	..	9,250	185	..	5,973	112	..	73
	Bamboos	..	..	..	..	..	..	..	..
	Minor produce	..	..	11	..	..	..	..	11
Anantapur	Timber	..	308	94	..	..	..	..	94
	Fuel	..	200,396	10,843	..	..	..	..	10,843
	Bamboos	13,586	..	946	..	..	..	..	946
	Minor produce	MDS. 206	..	824	MDS. 32	..	128	..	696
Guntūr	Timber	..	..	..	..	..	..	..	..
	Fuel	..	75	6	..	..	..	..	6
	Bamboos	..	..	..	..	..	..	..	..
	Minor produce	MDS 1,520	..	380	MDS 103	..	26	..	354
North Cuddapah.	Timber	..	3,769	4,992	..	1,533	2,117	..	2,875
	Fuel	..	9,220	633	..	6,900	414	..	219
	Bamboos	155	..	12	..	..	..	..	12
	Minor produce	MDS. 320	..	49	..	..	..	..	49

(a) No sale depots in this district, hence blank. Last year's balance relates to Forest depots.
(b) Excludes 7,572 c. ft. belonging to the Parlakimedi Maliahs.
(c) Do. Rs 1,109 being the value of sal logs belonging to the Parlakimedi Maliahs.
(d) Do. . 1,099 bamboos belonging to the Parlakimedi Maliahs.
(e) Do. Rs. 72 being value of bamboos belonging to the Parlakimedi Maliahs.

Statement showing the value of Timber and other Produce at Sale depots for 1912–13—*cont.*

District	Description of timber or produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.	
		Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favour of the year.	Against the year.
1	2	3	4	5	6	7	8	9	10
	Central Circle—cont.			RS.			RS.	RS.	RS.
East Cuddapah.	Timber	..	3,990	2,015	..	3,334	2,373	358	..
	Fuel	..	2,235	115	..	32	24	..	91
	Bamboos ..	..	..	..	..	..	..	..	..
	Minor produce ..	MDS. 664	..	130	MDS. 2,690	..	622	492	..
Nellore ..	Timber	..	99	5	..	..	..	..	5
	Fuel	..	37,021	3,122	..	..	..	..	3,122
	Bamboos ..	..	..	..	..	..	..	..	..
	Minor produce ..	MDS. * 3,174	..	1,855	MDS. 2,139	..	1,182	..	673
Chingleput.	Timber	..	76	14	..	..	..	..	14
	Fuel	..	418	51	..	† 1,020	..	..	51
	Bamboos ..	..	..	..	..	..	..	..	..
	Minor produce ..	MDS. † 3,494	..	..	† 2,390	..	..	..	..
Chittoor ..	Timber	..	45	12	..	24	95	83	..
	Fuel	..	23,560	3,226	..	2,601	210	..	3,016
	Bamboos ..	..	..	..	..	..	..	..	..
	Minor produce ..	MDS. 107	..	543	397	..	853	310	..
	Southern Circle.								
Vellore, North.	Timber	..	1,311	654	..	..	..	..	654
	Fuel	..	11,394	667	..	10,886	555	..	112
	Minor produce ..	MDS. 68	..	52	MDS. 68	..	1	..	51
Vellore, South.	Timber	..	3,127	34,569	..	2,318	27,552	..	7,017
	Euel	..	34,671	1,926	..	533	29	..	1,897
	Minor produce ..	MDS. 320	..	17	..	..	..	..	17
Arcot, South ..	....	..	..	.	..	..	..	..	..
Salem, North.	Timber	..	2,276	1,509	..	1,240	459	..	1,050
	Fuel	..	1,144	138	..	..	..	..	138
	Bamboos ..	24,078	..	472	..	..	..	..	472
	Minor produce ..	MDS. 449	..	45	MDS. 40	..	4	..	41
Salem, South.	Timber	..	519	268	..	285	402	134	..
	Fuel	..	1,665	156	..	..	..	..	156
	Minor produce ..	MDS. 203	..	4	MDS. 340	..	15	11	..
Trichinopoly	Timber	..	223	60	..	13	3	..	57
	Fuel	..	51	6	..	..	..	..	6
	Bamboos ..	3,017	..	15	..	..	..	..	15
	Minor produce ..	MDS. 178	..	50	..	..	..	..	50
Madura ..	Timber	..	12	3	..	27	7	4	..
	Fuel	..	..	..	..	100	6	6	..
Tinnevelly ..	Timber	..	2,309	331	..	4,949	549	218	..
	Fuel	..	60	4	..	6,918	103	99	..
	Minor produce ..	MDS. 52	..	198	MDS. 57	..	160	..	38
	Western Circle.								
South Canara.	Timber	..	984	615	..	986	619	4	..
	Fuel	..	69,831	6,749	..	98,055	11,979	5,230	..
	Bamboos	549	..	61	812	..	89	28	..
	Minor produce ..	QRS. 23	..	147	..	..	..	..	147

* Less than one quarter.

† Deducted as these were the stock at *forest* and not *sale* depots.

Statement showing the value of Timber and other Produce at Sale depots for 1912–13—*cont.*

District.	Description of timber or produce.	On hand at commencement of the year. Number.	On hand at commencement of the year. Cubic feet.	On hand at commencement of the year. Value.	On hand at close of the year. Number.	On hand at close of the year. Cubic feet.	On hand at close of the year. Value.	Difference in value. In favour of the year.	Difference in value. Against the year.
1	2	3	4	5	6	7	8	9	10
	Western Circle—cont.			RS.			RS.	RS.	RS.
North Malabar.	Timber	..	17,984	7,837	..	21,948	10,949	3,112	..
	Fuel	..	11,480	932	..	4,139	284	..	648
	Bamboos ..	1,057	..	95	5,427	..	486	391	..
	Minor produce ..	QRS. *..	..	6	QRS. *..	..	24	18	..
South Malabar.	Timber	..	117,657 †-117,657	1,39,500 †-1,39,500	..	..	..	..	..
	Fuel	..	128 † — 128	3 † — 3	..	..	..	..	..
	Bamboos	27,367	..	1,915	..	..	..	..	1,915
	Minor produce ..	QRS. 3	..	500	..	..	..	..	500
The Nilgiris.	Timber	..	2,442	1,620	..	3,470	1,396	..	224
	Fuel	..	19,773	1,576	..	27,479	2,196	620	..
Kollegal.	Timber	..	1,086	472	..	1,850	913	441	..
	Fuel	..	..	..	..	920	43	43	..
	Bamboos	5,004	..	80	6,718	..	265	185	..
	Minor produce ..	QRS. 650	..	1,269	QRS. 169	..	576	..	.. 693
North Coimbatore.	Timber	..	713	9,974	..	64	53	..	9,921
	Minor produce ..	QRS. 79	..	351	QRS. 180	..	706	355	..
Central Coimbatore.	Fuel	..	..	..	..	397	32	32	..
	Minor produce ..	QRS. 40	..	14	QRS. 27	..	7	..	7
South Coimbatore.	Timber	..	94,478	1,22,867	..	1,20,952	1,81,191	58,324	..
	Fuel	..	53,031	1,072	..	27,720	486	..	586
	Minor produce ..	QRS. 54	..	533	QRS. 236	..	588	55	..
Northern Circle.	Timber	..	116,993	73,341	..	28,816	19,574	..	53,767
	Fuel	..	887,943	43,923	..	202,678	7,694	13	36,242
	Bamboos ..	21,471	..	354	29,307	..	593	365	126
	Minor produce ..	MDS. 11,197	..	2,952	MDS. 9,673	..	2,681	1,774	2,045
	Total value ..	..	..	1,20,570	..	..	30,542	..	90,028
Central Circle.	Timber	..	9,113	9,652	..	4,891	4,585	..	5,067
	Fuel	..	282,175	18,181	..	16,526	760	..	17,421
	Bamboos ..	13,741	..	958	..	..	..	..	958
	Minor produce ..	MDS. 9,485	..	3,792	7,751	..	2,811	..	981
	Total value ..	..	..	32,583	..	..	8,156	..	24,427
Southern Circle.	Timber	..	9,777	37,394	..	8,832	28,972	..	8,422
	Fuel	..	48,985	2,897	..	18,437	693	..	2,204
	Bamboos No	27,095	..	487	..	..	..	..	487
	Minor produce ..	MDS. 1,270	..	366	MDS. 505	..	180	..	186
	Total value ..	..	..	41,144	..	..	29,845	..	11,299
Western Circle.	Timber ..	..	117,687	1,43,385	..	149,270	1,95,121	51,736	..
	Fuel		154,115	10,329	..	158,710	15,020	4,691	..
	Bamboos ..	33,977	..	2,151	12,957	..	840	..	1,311
	Minor produce ..	QRS. 849	..	2,820	QRS. 612	..	1,901	..	919
	Total value ..	..	..	1,58,685	..	..	2,12,882	54,197	..
Total Presidency.	Timber	..	2.53,570	2,63,772	..	191,809	2,48,252	51,736	67,256
	Fuel	..	1,373,218	75,330	..	896,351	24,167	4,704	55,867
	Bamboos	96,284		3,950	42,264	..	1,433	365	2,882
	Minor produce ..	MDS. 21,952 QRS. 849	..	9,930	MDS. 18,029 QRS. 612	..	7,573	1,774	4,131
	Grand Total, Presidency ..	..	..	3,52,982	..	..	2,81,425	..	71,557

* Revised figure.

† Value not settled for want of demand.

Annual Form No. 80.

Forest Department, Madras Presidency.

Summary of Revenue of the different districts for the Forest year 1912–13.

ANNUAL

Forest Department,

SUMMARY of Revenue of the different districts

Budget heads—Receipts.	Northern						
	Direction.	Ganjām.	Vizagapatam.	Gōdāvari, Upper.	Gōdāvari, Lower.	Kistna.	Kurnool, East.
1	2	3	4	5	6	7	8
Receipts.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Timber and other produce removed from the forests by Government Agency—							
(*a*) Timber	45	10,089	4,034	1,813	2,548	1,087	16,400
(*b*) Firewood and charcoal.	60	3,117	5,270	799	13,582	7,945	253
(*c*) Bamboos	..	4,963	12,637	..	..	273	..
(*d*) Sandalwood	..	..	..	..	..	..	..
(*e*) Grass and other minor produce.. ..	20	840	510	408	..	119	1,442
II. Timber and other produce removed from the forests by consumers or purchasers—							
(*a*) Timber	..	16,606	4,104	33,256	33,046	14,601	2,230
(*b*) Firewood and charcoal	..	9,567	1,667	602	26,767	22,944	574
(*c*) Bamboos	..	2,449	4,046	8,893	34,359	1,459	2,350
(*d*) Grazing and fodder grass	..	11,412	5,356	8,537	17,827	22,364	31,906
(*e*) Other produce	..	2,902	9,612	983	35,757	9,002	13,459
(*f*) Tree-owner's fees	..	907	383	..	4,584	10,461	1,482
(*g*) Other items	..	..	10	..	..	..	..
(*h*) Commutation fees	..	..	..	2,222		..	..
III. Confiscated drift and waifwood	..	310	60	1,926	6,503	87	113
IV. Revenue from forest not managed by Government.							
V. Miscellaneous—							
(*a*) Fines and forfeitures.	..	2,483	1,161	108	4,663	3,386	2,646
(*b*) Other sources	32	1,108	397	549	4,755	1,410	425
Total, Receipts ..	157	66,753	49,247	60,096	1,84,391	95,138	73,280

Budget heads.	Southern						
	Direction.	North Vellore.	South Vellore.	Arcot, South.	North Salem.	South Salem.	Trichinopoly *cum* Tanjore.
	22	23	24	25	26	27	28
Receipts	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Timber and other produce removed from the forests by Government Agency—							
(*a*) Timber	..	133	79	183	4,198	897	159
(*b*) Firewood and charcoal	..	924	579	20,614	308	127	5,832
(*c*) Bamboos	..	— 155	20	187	253	..	88
(*d*) Sandalwood	16,310	434	1,44,059	..	3	3,372	..
(*e*) Grass and other minor produce ..	..	217	24	1	353	17	46
II. Timber and other produce removed from the forests by consumers or purchasers—							
(*a*) Timber	..	15,486	17,994	16,116	7,406	9,277	12,300
(*b*) Firewood and charcoal	..	32,895	18,978	79,651	10,695	18,079	79,402
(*c*) Bamboos	..	17,214	36,588	317	9,855	27,386	4,493
(*d*) Grazing and fodder grass	..	26,613	27,291	27,798	47,415	21,303	29,217
(*e*) Other produce	700	26,976	20,650	37,269	28,797	28,318	32,236
(*f*) Rents for trees tapped	..	6,244	1,213	2,216	1,308	275	236
(*g*) Other items	..	..	..	40	601	..	..
(*h*) Commutation fees	..	..	..	..	..	..	..
III. Confiscated drift and waifwood	..	52	122	170	143	75	76
IV. Revenue from forest not managed by Government—							
(*a*) Shared and private forests	..	..	..	..	..	..	..
V. Miscellaneous—							
(*a*) Fines and forfeitures	..	18,104	14,046	16,966	7,268	5,178	26,229
(*b*) Other sources	16	1,132	691	926	1,526	5,990	206
Total, Receipts ..	17,026	1,46,269	2,82,334	2,02,454	1,20,129	1,20,294	1,90,520

ACCOUNTANT-GENERAL'S OFFICE,
MADRAS, 1*st September* 1913.

S. VENKATARAMANAN,
for *Deputy Accountant-General.*

NOTE Southern Circle.—The revenue under " Direction " is distributed as follows:—
I. (*d*) South Vellore, Rs. 36 ; North Salem, Rs. 16,274.
II. (*e*) North Vellore, Rs. 700 ; V. (*b*) Direction, Rs. 3 ; South Vellore, Rs. 6 ; and Madura, Rs. 7.

ACCOUNTANT-GENERAL'S OFFICE,
MADRAS, 5*th September* 1913.

S. VENKATARAMANAN,
for *Deputy Accountant-General.*

Form No. 80.

Madras Presidency.

for the Forest year 1912–13.

Circle.			Central Circle.									
Kurnool, South.	Kurnool, West.	Total.	Direction.	Guntúr.	Nellore.	Cuddapah, North.	Cuddapah, East.	Bellary.	Anantapur.	Chittoor.	Chingleput.	Total.
9	10	11	12	13	14	15	16	17	18	19	20	21
RS.	RS.	RS.	RS.	RS.	RS.	RS	RS.	RS.	RS.	RS.	RS.	RS.
14,934	38,890	89,840	..	3,297	9	4,369	11,715	— 623	148	1,542	2	20,45
28,104	20,513	79,643	..	19,831	4,511	2,323	13,183	786	4,489	17,607	457	63,187
2,424	24,581	44,878	..	..	..	28	..	302	264	1,291	..	1,885
..	..	..	..	..	..	..	..	3,937	..	3	..	3,940
578	1,193	5,110	..	3,125	8,713	1,098	4,998	44	..	1,137	..	19,115
1,775	385	1,06,003	..	27,880	9,360	4,098	709	17,395	12,826	4,689	16,535	93,492
6,132	9,078	77,331	..	12,783	59,322	5,913	10,220	8,317	6,013	10,918	13,484	1,26,970
7,060	12,189	72,805	..	10	12	594	6,188	50	..	3,992	35	10,881
11,864	19,632	1,28,898	..	67,990	53,696	18,328	16,651	41,287	29,288	20,669	12,820	2,60,729
6,254	17,671	95,640	..	19,595	52,770	13,806	9,788	40,856	1,01,614	33,492	12,039	2,83,960
2,589	15,868	36,274	..	4,816	2,766	1,871	1,546	28,534	11,585	2,641	4,011	57,770
3	..	13	..	..	..	..	524	..	..	..	..	524
..	..	2,222	..	..	..	..	..	..	..	..	..	..
2,574	762	12,335	..	115	540	122	200	246	154	60	8	1,445
3,139	2,802	20,388	..	18,906	8,166	4,345	8,030	10,310	8,691	6,188	3,705	68,341
1,572	1,568	11,816	..	863	517	396	945	2,129	345	1,166	1,104	7,465
89,002	1,65,132	7,83,196	..	1,79,211	2,00,382	57,291	84,697	1,53,570	1,75,417	1,05,395	64,200	10,20,163

Circle.			Western Circle.									
Madura.	Tinnevelly and Rāmnād.	Total.	Direction.	South Canara.	North Malabar.	South Malabar.	The Nilgiris.	Kollegal.	North Coimbatore.	Central Coimbatore.	South Coimbatore.	Total.
29	30	31	32	33	34	35	36	37	38	39	40	41
RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS	RS.	RS.
30	52	5,731	3,535	6,381	14,647	1,31,559	7,570	723	713	7	62,337	2,27,472
9,225	392	38,001	..	44,471	711	198	24,611	7,002	16,406	1,768	2,740	97,907
..	4	397	..	2,230	1,465	5,065	..	2,499	25	..	..	11,284
..	..	1,64,178	97,848	..	..	..	3,801	3	94	6	.	1,01,752
117	10	785	6	13,336	10	476	1,307	4,687	7,009	29	2,535	29,395
16,266	3,400	98,245	..	14,958	23,413	111	1,359	1,844	2,451	6,955	2,435	53,526
79,431	91,613	4,10,744	..	17,614	..	5	2,473	287	2,435	24,547	5,586	52,947
3,578	111	99,542	..	1,992	364	752	2,993	650	6,799	7,266	1,660	22,476
32,698	6,251	2,18,586	..	11,777	2,542	2	9,423	20,995	29,116	6,703	2,738	83,296
32,254	25,808	2,33,008	530	12,932	3,985	2,118	3,724	2,580	3,522	9,347	2,146	40,884
6	15	11,513	..	2,203	..	3	..	23	31	— 3	..	2,257
..	..	641	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	..
409	788	1,835	..	1,033	..	82	48	281	273	272	581	2,570
..	..	..	..	..	..	..	..	..	..	..	..	..
16,826	6,041	1,10,658	..	7,976	161	47	443	5,005	6,615	6,009	1,789	28,045
1,714	2,127	14,328	1,02,052	6,113	6,502	9,731	7,263	2,100	3,480	2,083	14,085	1,53,409
1,92,554	1,36,612	14,08,192	2,03,971	1,43,016	53,800	1,50,149	65,015	48,679	78,969	64,989	98,632	9,07,220

Note (*Central Circle*).—The revenue realised in the Madras Bank and credited under "Direction" has been distributed to the districts concerned.

Accountant-General's Office,
Madras, 1*st September* 1913.

S. Venkataramanan,
for *Deputy Accountant-General.*

Note (*Western Circle*).—Particulars of revenue credited under Direction—

I (*a*) and II (*e*) relate to *South Coimbatore.*
(*d*) *Kollegal*, Rs. 58,782. *North Coimbatore*, Rs. 39,066.
(*e*) *South Canara*, Rs. 2. *The Nilgiris*, Rs. 3. *Central Coimbatore*, Re. 1.
V (*b*) *Direction*, Rs. 276.
South Malabar, Rs. 3,605. *North Malabar*, Rs. 23,090.
South Coimbatore, Rs. 72,171. *The Nilgiris*, Rs. 2,910.

South Malabar —The revenue under I (*a*) includes Rs. 460 relating to *South Coimbatore* and that under V (*b*) includes Rs. 4,490 and Rs. 3,360 relating to *North Malabar* and *the Nilgiris* respectively.

Accountant-General's Office,
Madras, 5*th September* 1913.

S. Venkataramanan,
for *Deputy Accountant-General.*

SUMMARY of Expenditure of the different districts for the Forest year 1912–13.

Budget heads.	Direction.	Ganjām.	Vizagapatam.	Gōdāvari, Upper.	Gōdāvari, Lower.	Kistna.	Kurnool, East.	Kurnool, South.	Kurnool, West.	Total.
1	2	3	4	5	6	7	8	9	10	11
Northern Circle.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Refunds and drawbacks ..	..	819	42	49	2,765	3,897	118	189	750	8,629
A Conservancy and Works.										
Timber, etc., removed from the forest by Government Agency—										
(a) Timber	3	5,156	452	— 37	..	248	5,950	5,431	18,031	35,234
(b) Firewood and charcoal ..	8	1,620	1,664	261	1,707	1,011	73	16,740	9,368	32,452
(c) Bamboos	..	3,208	7,569	..	..	620	..	1,714	11,480	24,591
(d) Sandalwood ..	..	..	..	..	..	.	..	.	..	..
(e) Grass and other minor produce..	..	1,539	130	270	..	209	1,177	1,336	1,731	6,392
II. Timber, etc., removed from the forests by consumers, etc. ..	..	6,134	5,596	3,979	12,390	2,594	6,837	6,452	11,489	55,471
III. Confiscated drift and waifwood	..	12	..	13	1,813	..	..	67	7	1,912
V. Rent of leased forests and payments to shareholders in forests managed by Government	..	..	474	..	..	..	..	..	..	474
VI. Live-stock, stores, etc.—										
(a) Purchase of cattle.	..	295	..	..	..	..	..	966	..	1,261
(b) Feed and keep of cattle	17	2,029	1,042	676	..	..	..	2,157	1,628	7,549
(c) Stores, tools and plant	1,009	476	113	739	4,031	728	389	1,724	708	9,917
VII. Communications and buildings—										
(a) Roads and bridges	55	6,006	561	4,207	2,140	4,055	6,274	10,005	2,584	35,887
(b) Buildings ..	1,604	9,786	4,713	2,368	4,591	1,512	12,134	7,876	4,529	49,113
(c) Other works	..	393	105	169	295	1,184	16	1,102	2,341	5,605
VIII. Demarcation, improvement and extension of forests—										
(a) Demarcation ..	..	564	653	8,714	8	724	627	484	167	11,941
(b) Cost of forest settlement; compensation for land and rights.	..	477	92	..	188	..	71	..	..	828
(c) Surveys—										
(1) Local ..	..	1,304	93	2,773	638	840	1,398	2,509	1,071	10,626
(2) India ..	..	..	..	..	..	..	..	..	..	..
(d) Working plans ..	..	..	..	..	..	..	..	1	.	1
(e) Sowing and planting	5,046	508	155	252	4,879	7,444	10,165	4,577	42,601	75,627
(f) Protection from fire	..	4,459	2,401	5,215	6,101	1,796	5,427	21,513	10,649	57,561
(g) Other works ..	..	268	74	..	1,170	8,832	700	548	3,532	15,124
X. Miscellaneous—										
(a) Law charges ..	..	..	..	..	..	.	..	..	..	..
(b) Other charges ..	75	233	..	..	56	218	..	476	550	1,608
Total, A. Conservancy and Works	7,817	44,467	25,887	29,599	40,007	32,015	51,238	85,678	1,22,466	4,39,174

ACCOUNTANT-GENERAL'S OFFICE,
MADRAS, 1st *September* 1913.

S. VENKATARAMANAN,
for *Deputy Accountant-General.*

Summary of Expenditure of the different districts for the Forest year 1912–13—*cont.*

Budget heads.	Direction.	Ganjam.	Vizagapatam.	Gōdāvari, Upper.	Gōdāvari, Lower.	Kistna.	Kurnool East.	Kurnool, South.	Kurnool, West.	Total.
1	2	3	4	5	6	7	8	9	10	11
Northern Circle—cont.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
B. "Establishments."										
Brought forward, Total A. "Conservancy and Works"	7,817	44,467	25,887	29,599	40,007	32,015	51,238	85,678	1,22,466	4,39,174
I. Salaries—										
(a) Conservators	22,800	..	..	..	..	..	..	..	..	22,800
(b) Superior officers	1,045	12,587	20,732	4,385	8,957	5,947	7,950	7,588	21,345	90,536
(c) Subordinate Forest and Depot establishments	3,416	20,693	6,997	13,388	12,842	8,576	12,203	19,989	22,080	1,20,184
(d) Office establishments	9,458	6,756	4,861	4,831	6,468	3,768	4,908	6,012	8,183	55,245
(e) Deputation and special Allowances	..	— 32	— 14	7	10	20	..	53	27	71
II. Travelling allowances—										
(a) Conservators	3,273	..	..	..	..	..	..	..	..	3,273
(b) Superior officers	..	2,089	3,419	1,964	1,326	1,357	1,634	2,010	2,965	16,764
(c) Subordinate Forest and Depot establishments	318	5,732	1,819	4,059	4,409	2,624	3,769	6,901	6,208	35,839
(d) Office establishments	1,555	2,041	959	1,222	1,475	933	1,594	1,754	1,468	13,001
III. Contingencies—										
(a) Rents, rates and taxes	136	140	471	..	167	315	269	80	189	1,767
(b) Official postage and service telegrams	1,228	1,512	685	967	1,298	1,243	746	1,209	1,342	10,230
(c) Telephhone Charges	..	..	..	..	..	..	..	..	..	..
(d) Sundries	11,814	1,843	2,127	1,989	3,476	1,115	1,895	1,362	1,851	27,472
Total, B. "Establishments" ..	55,043	53,361	42,056	32,812	40,428	25,898	34,968	46,958	65,658	3,97,182
Grand Total of expenditure A and B ..	62,860	97,828	67,943	62,411	80,435	57,913	86,206	1,32,636	1,88,124	8,36,356

ACCOUNTANT-GENERAL'S OFFICE,
MADRAS, 1st *September* 1913.

S. VENKATARAMANAN,
for *Deputy Accountant-General.*

SUMMARY of Expenditure of the different districts for the Forest year 1912-13.

Budget heads.	Direction.	Guntúr.	Nellore.	Cuddapah, North.	Cuddapah, East.	Bellary.	Anantapur.	Chittoor.	Chingleput.	Total.
CENTRAL CIRCLE.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Refunds and Drawbacks.	..	1,371	1,628	1,464	170	392	773	351	454	6,603
A. Conservancy and Works.										
I. Timber, etc., removed from the forest by Government Agency—										
(a) Timber ..	..	650	..	1,273	3,973	53	53	382	..	6,384
(b) Firewood and charcoal.	..	11,852	1,249	4,321	9,590	229	3,274	5,846	1,237	37,598
(c) Bamboos ..	..	..	..	11	..	240	121	622	..	994
(d) Sandalwood ..	..	..	..	..	..	705	..	4	..	709
(e) Grass and other minor produce.	..	2,281	2,746	732	5,036	6	..	656	..	11,457
II. Timber, etc., removed from the forests by consumers, etc.	..	3,509	4,781	7,352	8,461	2,468	1,945	2,772	1,623	32,911
III. Confiscated, drift and waifwood.	..	4	..	26	13	11	..	..	..	54
V. Rent of leased forests and payments to shareholders in forests managed by Government.	..	..	..	..	..	8,000	..	..	..	8,000
VI. Live-stock, stores, tools and plant—										
(a) Purchase of cattle.	..	..	..	..	1,044	..	..	..	..	1,044
(b) Feed and keep of cattle.	..	..	..	..	..	59	..	194	..	253
(c) Stores, tools and plant.	2,883	1,269	1,590	5	800	531	806	1,403	277	9,564
VII. Communications and buildings—										
(a) Roads and bridges.	..	17	81	1,587	4,986	2,428	3,158	1,941	73	14,271
(b) Buildings .	..	2,880	9,147	4,614	9,314	12,873	6,815	5,470	703	51,816
(c) Other works ..	..	468	70	728	338	401	1,244	468	180	3,897
VIII. Demarcation, improvement and extension of forests—										
(a) Demarcation ..	..	551	845	973	471	430	2,501	893	1,175	7,839
(b) Cost of forest settlement; compensation for land and rights.	..	..	95	..	2,076	5,569	750	110	..	8,600
(c) Surveys—										
(1) Local ..	983	1,054	1,263	633	753	1,468	1,452	480	388	8,474
(2) India ..	..	..	..	..	..	..	..	..	..	..
(d) Working plans.	..	..	20	— 32	..	..	..	..	..	— 2
(e) Sowing and planting.	..	16,741	17,557	1,244	683	12,704	3,116	970	1,743	54,758
(f) Protection from fire.	..	355	1,357	5,360	5,224	7,366	6,033	1,486	907	28,088
(g) Other works ..	..	11,005	6,805	4,574	1,936	15,174	16,549	13,078	10,739	79,860
IX. Miscellaneous—										
(a) Law charges ..	..	3	4	..	..	200	423	21	..	651
(b) Other charges .	93	299	15	591	938	1,259	..	52	20	3,267
Total, A. Conservancy and Works.	3,959	52,938	47,635	33,992	55,636	72,17[illegible]	48,240	36,848	19,065	3,70,487

Summary of Expenditure of the different districts for the Forest year 1912–13—*cont.*

Budget heads.	Direction.	Guntur.	Nellore.	Cuddapah, North.	Cuddapah, East.	Bellary.	Anantapur.	Chittoor.	Chingleput.	Total.
CENTRAL CIRCLE—*cont.*	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
B. "*Establishments.*"										
Brought forward, Total A. "Conservancy and Works"	3,959	52,938	47,635	33,992	55,636	72,174	48,240	36,848	19,065	3,70,487
I. Salaries—										
(*a*) Conservators	20,843	..	..	..	..	..	..	..	..	20,843
(*b*) Superior officers ..	2,744	9,388	7,742	5,680	7,456	13,212	15,000	15,000	7,528	83,750
(*c*) Subordinate Forest and Depot establishments.	3,927	13,862	14,847	8,744	14,629	22,794	13,604	15,062	8,169	1,15,638
(*d*) Office establishments ..	9,254	6,711	10,843	4,311	5,194	7,055	4,722	4,833	3,801	56,724
(*e*) Deputation and special allowances	..	..	4	..	..	..	..	4	..	8
II. Travelling allowances—										
(*a*) Conservators ..	1,226	..	373	53	..	247	..	96	..	1,995
(*b*) Superior officers ..	91	1,473	1,134	1,093	1,333	1,701	1,282	1,084	1,330	10,521
(*c*) Subordinate Forest and Depot establishments ..	205	4,133	4,022	2,743	3,920	6,655	4,002	4,193	2,087	31,960
(*d*) Office establishments	1,049	1,234	2,353	762	869	1,604	1,775	748	584	10,978
III. Contingencies—										
(*a*) Rents, rates and taxes.	..	221	109	59	70	740	141	156	32	1,528
(*b*) Official postage and service telegrams ..	877	1,530	1,734	859	994	1,489	1,288	1,288	710	10,769
(*c*) Telephone charges..	..	..	..		..	..	..	..	..	
(*d*) Sundries	8,134	1,484	1,493	1,257	1,729	3,451	3,216	1,552	713	23,029
Total, B. "Establishments".	48,350	40,036	44,654	25,561	36,194	58,948	45,030	44,016	24,954	3,67,743
Grand Total of Expenditure A and B.	52,309	92,974	92,289	59,553	91,830	1,31,122	93,270	80,864	44,019	7,38,230

ACCOUNTANT-GENERAL'S OFFICE,
MADRAS, 1st *September* 1913.

S. VENKATARAMANAN,
for *Deputy Accountant-General.*

SUMMARY of Expenditure of the different districts for the Forest year 1912–13.

Budget heads.	Direction.	North Vellore.	South Vellore.	South Arcot.	North Salem.	South Salem.	Trichinopoly *cum* Tanjore.	Madura.	Tinnevelly and Ramnad.	Total.
1	2	3	4	5	6	7	8	9	10	11
Southern Circle.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I Refunds and Drawbacks.	..	388	1,590	672	766	962	1,880	345	416	7,019
A. Conservancy and Works.										
I. Timber and other produce removed from the forests by Government Agency—										
(*a*) Timber ..	..	49	237	..	1,737	406	312	..	.	2,741
(*b*) Firewood and charcoal ..	..	54	870	3,141	1,609	587	3,230	8,028	157	17,676
(*c*) Bamboos ..	..	..	38	45	64	..	—9	..	10	148
(*d*) Sandalwood ..	..	2	5,558	..	2,852	295	..	..	..	8,707
(*e*) Grass and other minor produce.	..	10	..	..	188	25	..	..	12	235
II. Timber and other produce removed from the forests by consumers or purchasers ..	..	2,795	2,443	1,936	2,019	3,884	3,333	3,886	2,995	23,291
III. Confiscated drift and waifwood	..	..	..	..	..	6	3	6	..	15
V. Rent of leased forests and payments to shareholders in forests managed by Government.	..	..	..	..	37	..	..	..	..	37
VI. Live-stock, stores, tools and plant—								..	..	..
(*a*) Purchase of cattle ..	..	..	..	..	..	..	..	..	..	..
(*b*) Feed and keep of cattle ..	..	103	15	..	..	..	..	..	..	118
(*c*) Stores, tools and plant ..	259	957	198	82	297	405	421	286	348	3,253
VII. Communications and buildings –										
(*a*) Roads and bridges ..	..	4,017	5,294	..	4,345	4,340	3,373	10,769	3,506	35,644
(*b*) Buildings ..	..	5,738	6,772	2,442	11,172	9,413	5,204	12,051	4,850	57,642
(*c*) Other works ..	..	287	483	111	662	624	364	581	676	3,788
VIII. Demarcation, improvement and extension of forests—										
(*a*) Demarcation ..	..	24	18	170	—120	467	65	5,031	800	6,455
(*b*) Cost of forest settlement; compensation for land and rights ..	..	..	..	..	..	..	..	650	163	813
(*c*) Surveys { Local.	580	..	584	468	1,740	1,184	580	1,125	266	6,527
(*c*) Surveys { India.	..	.	..	..	..	..	..	..	..	..
(*d*) Working plans.	..	..	..	..	..	..	..	..	..	..
(*e*) Sowing and planting ..	36	5,851	202	4,764	764	219	3,933	7,439	985	24,193
(*f*) Protection from fire	..	617	3,155	316	2,194	3,316	571	3,117	2,708	15,994
(*g*) Other works ..	..	7,377	8,258	13,989	7,375	6,425	10,614	13,390	5,896	73,324
IX. Miscellaneous—										
(*a*) Law charges ..	..	..	..	..	22	..	..	..	2	24
(*b*) Other charges ..	..	67	276	.	153	9	49	137	66	757
Total, A. Conservancy and Works	875	27,948	34,401	27,464	37,110	31,605	32,043	66,496	23,440	2,81,382

Summary of Expenditure of the different districts for the Forest year 1912-1913—*cont.*

Budget heads	Direction.	North Vellore.	South Vellore.	South Arcot.	North Salem.	South Salem.	Trichinopoly *cum* Tanjore.	Madura.	Tinnevelly and Ramnad.	Total.
1	2	3	4	5	6	7	8	9	10	11
***Southern Circle*—cont.**	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
B. Establishments.										
Brought forward, Total A. "**Conservancy** and Works."	875	27,948	34,401	27,464	37,110	31,605	32,043	66,496	23,440	**2,81,382**
I. Salaries—										
(*a*) Conservators ..	18,000	..	..	..	..	..	..	..	..	**18,000**
(*b*) Superior officers ..	1,045	5,800	8,173	5,490	14,363	6,052	17,194	22,754	15,000	**95,871**
(*c*) Subordinate Forest and Depôt establishments.	1,200	10,226	13,808	10,651	12,230	15,340	16,631	15,528	14,620	**1,10,234**
(*d*) Office establishments.	8,067	2,855	5,090	4,855	6,087	5,382	6,958	6,558	5,650	**51,502**
(*e*) Bonus	..	97	13	9	25	17	..	..	..	**161**
II. Travelling Allowances—										
(*a*) Conservators ..	2,285	..	..	..	..	..	..	..	..	**2,285**
(*b*) Superior officers ..	..	990	1,371	1,149	1,569	1,044	2,102	2,725	1,036	**11,986**
(*c*) Subordinate Forest and Depot establishments.	71	2,955	3,581	3,024	4,154	4,053	4,599	3,948	3,326	**29,711**
(*d*) Office establishments.	624	577	979	929	870	608	1,323	1,872	980	**8,762**
III. Contingencies—										
(*a*) Rents, Rates and Taxes.	2	55	205	323	124	65	137	216	166	**1,293**
(*b*) Official postage and Service telegrams.	740	1,074	1,485	1,893	1,284	1,051	1,969	1,652	1,076	**12,224**
(*c*) Telephone charges.	..	..	..	..	..	..	..	..	..	..
(*d*) Sundries	7,304	1,682	1,260	1,020	1,703	1,766	1,525	1,962	801	**19,023**
Total B. "Establishments."	39,338	26,311	35,965	29,343	42,409	35,378	52,438	57,215	42,655	**3,61,052**
Grand Total of Expenditure A and B.	40,213	54,259	70,366	56,807	79,519	66,983	84,481	1,23,711	66,095	**6,42,434**

ACCOUNTANT-GENERAL'S OFFICE,
MADRAS, *5th September* 1913.

S. VENKATARAMANAN,
for *Deputy Accountant-General.*

SUMMARY of Expenditure of the different districts for the Forest year 1912–13.

Budget heads.	Direction.	South Canara.	North Malabar.	South Malabar.	The Nilgiris.	Kollegal.	North Coimbatore.	Central Coimbatore.	South Coimbatore.	Total.
1	2	3	4	5	6	7	8	9	10	11
WESTERN CIRCLE.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Refunds and Drawbacks	10	1,535	3	..	113	26	177	981	80	2,925
A. Conservancy and Works.										
I. Timber, etc., removed from the Forests by Government Agency—										
(*a*) Timber	..	1,433	8,992	13,440	3,598	420	329	..	8,822	37,034
(*b*) Firewood and charcoal.	..	25,620	445	3	18,493	6,926	8,433	2,005	2,132	64,057
(*c*) Bamboos	..	1,319	940	2,466	..	1,363	24	87	1	6,200
(*d*) Sandalwood ..	..	..	..	..	177	3,625	10,877	..	..	14,679
(*e*) Grass and other minor produce.	..	3,759	..	4	96	1,552	3,646	30	1,062	10,149
II. Timber, etc., removed from the Forests by consumers, etc.	..	6,885	510	..	920	1,450	2,937	3,841	2,029	18,572
III. Confiscated, drift and waif wood.	..	3	5	..	..	13	60	3	23	107
V. Rent of leased forests and payments to shareholders in forests managed by Government.	..	..	53	676	4,472	..	..	..	2,500	7,701
VI. Live-stock, stores, etc.—										
(*a*) Purchase of cattle.	..	..	1,658	721	4,760	..	..	..	2,178	9,317
(*b*) Feed and keep of cattle.	..	3,898	15,406	16,915	17,414	..	..	420	20,033	74,086
(*c*) Stores, tools and plant.	243	1,374	528	927	1,556	220	227	238	2,115	7,428
VII. Communications and buildings—										
(*a*) Roads and bridges.	..	3,063	7,267	3,512	5,299	8,397	10,338	3,642	5,083	46,601
(*b*) Buildings	313	904	5,460	2,916	7,604	8,442	9,383	8,229	5,297	48,548
(*c*) Other works ..	..	608	1,769	201	2,377	2,311	759	273	197	8,495
VIII. Demarcation, improvement and extension of forests—										
(*a*) Demarcation ..	..	783	659	350	328	2,278	2,168	444	127	7,137
(*b*) Cost of Forest Settlement; compensation for land and rights.	..	897	..	743	..	440	..	23	460	2,563
(*c*) Surveys Local.	..	381	694	365	448	1,284	477	615	1,053	5,317
(*c*) Surveys India.	..	..	..	..	..	..	..	..	..	..
(*d*) Working plans ..	..	..	9	— 417	226	..	..	..	..	— 182
(*e*) Sowing and planting.	675	167	1,263	7,412	2,846	272	266	590	2,258	15,749
(*f*) Protection from fire.	..	4,428	7,049	2,341	3,860	2,702	3,010	3,289	2,607	29,286
(*g*) Other works ..	..	1,352	1,767	1,768	1,276	2,940	4,506	5,612	1,501	20,722
IX. Miscellaneous—										
(*a*) Law charges ..	..	..	..	..	..	30	..	..	..	30
(*b*) Other charges ..	192	— 35	25	16	3,548	387	359	766	461	5,719
Total, A. Conservancy and Works.	1,423	56,839	54,499	54,359	79,298	45,052	57,799	30,107	59,939	4,39,315

ACCOUNTANT-GENERAL'S OFFICE,
MADRAS, *5th September* 1913.

S. VENKATARAMANAN,
for *Deputy Accountant-General.*

NOTE.—The correct figures against A-VIII (*d*) to (*g*) under South Malabar and total are as follow :—

	South Malabar.	Total.
A-VIII (*d*)	23	258
(*e*)	6,982	15,319
(*f*)	2,467	29,412
(*g*)	1,632	20,586

The corrections are due to the readjustment of certain erroneous debits of June 1912 adjusted by the Accountant-General in this return while they had been already adjusted in the return for 1911–12.

Summary of Expenditure of the different districts for the Forest year 1912–13—*cont.*

Budget heads.	Direction.	South Canara.	North Malabar.	South Malabar.	The Nilgiris.	Kollegal.	North Coimbatore.	Central Coimbatore.	South Coimbatore.	Total.
1	2	3	4	5	6	7	8	9	10	11
WESTERN CIRCLE—*cont.*	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
B. Establishments.										
Brought forward, Total A. "Conservancy and Works."	1,423	56,839	54,499	54,359	79,298	45,052	57,799	30,107	59,939	4,39,315
I. Salaries—										
(*a*) Conservators ..	20,400	..	..	..	..	..	..	..	..	20,400
(*b*) Superior officers ..	1,044	10,362	16,200	11,013	20,843	3,413	17,191	4,306	14,400	98,772
(*c*) Subordinate Forest and Depot establishments.	3,660	17,128	14,363	7,984	21,026	7,298	12,758	9,292	10,462	1,03,971
(*d*) Office establishments.	9,805	7,224	6,311	4,794	6,324	3,692	5,639	4,324	5,517	53,630
(*e*) Bonus	..	15	..	..	..	13	..	..	..	28
II. Travelling allowances—										
(*a*) Conservators ..	2,568	..	..	..	..	..	..	..	..	2,568
(*b*) Superior officers ..	..	1,867	1,329	2,434	1,795	1,847	2,292	1,054	2,313	14,931
(*c*) Subordinate Forest and Depot establishments.	507	4,449	3,081	3,396	5,101	1,813	3,169	2,724	2,089	26,329
(*d*) Office establishments.	574	1,548	1,197	717	918	773	853	927	764	8,271
III. Contingencies—										
(*a*) Rents, rates and taxes.	72	114	151	16	958	620	33	37	115	2,116
(*b*) Official postage and service telegrams.	535	1,604	698	503	640	498	1,190	468	1,158	7,294
(*c*) Telphone charges ..	..	..	..	..	..	..	..	..	..	..
(*d*) Sundries ..	7,993	1,718	2,615	1,785	1,604	2,298	1,580	1,048	1,695	22,336
Total, B. "Establishments" ..	47,158	46,029	45,945	32,642	59,209	22,265	44,705	24,180	38,513	3,60,646
Grand Total of Expenditure A. and B.	48,581	1,02,868	1,00,444	87,001	1,38,507	67,317	1,02,504	54,287	98,452	7,99,961

ACCOUNTANT-GENERAL'S OFFICE,
MADRAS, *5th September* 1913.

S. VENKATARAMANAN,
for *Deputy Accountant-General.*

SUMMARY of receipts and expenditure during 1912-13 for each Circle and for the Presidency compiled in the Board's office from Accountant-General's statements.

Budget heads.	Northern Circle.	Central Circle.	Southern Circle.	Western Circle.	Grand total, Presidency. 1912-13.	Grand total, Presidency. 1911-12
1	2	3	4	5	6	7
RECEIPTS.	RS.	RS.	RS.	RS.	RS.	RS.
I. Timber and other produce removed from the forests by Government Agency—						
(a) Timber	89,840	20,459	5,731	2,27,472	3,43,502	3,63,970
(b) Firewood, etc.	79,643	63,187	38,001	97,907	2,78,738	7,68,516
(c) Bamboos	44,878	1,885	397	11,284	56,444	97,124
(d) Sandalwood..	..	3,940	1,64,178	1,01,752	2,71,870	1,43,043
(e) Grass and other minor produce.	5,110	19,115	785	29,395	54,405	53,066
Total, I ..	2,19,471	1,08,586	2,09,092	4,67,810	10,04,959	14,25,719
II. Timber and other produce removed from the forests by consumers—						
(a) Timber	1,06,003	93,492	98,245	53,526	3,51,266	2,79,002
(b) Firewood and charcoal ..	77,331	1,26,970	4,10,744	52,947	6,67,992	5,08,814
(c) Bamboos	72,805	10,881	99,542	22,476	2,05,704	2,03,785
(d) Grazing and fodder grass..	1,28,898	2,60,729	2,18,586	83,296	6,91,509	6,32,015
(e) Other produce	95,640	2,83,960	2,33,008	40,884	6,53,492	7,08,038
(f) Tree-owners' fees	36,274	57,770	11,513	2,257	1,07,814	1,09,457
(g) Other items..	13	524	641	..	1,178	924
(h) Commutation fees	2,222	..	..	..	2,222	2,761
Total, II ..	5,19,186	8,34,326	10,72,279	2,55,386	26,81,177	24,44,796
III. Confiscated drift and waifwood ..	12,335	1,445	1,835	2,570	18,185	14,740
IV. Revenue from forests not managed by Government.	..	..	..	..	..	..
V. Miscellaneous—						
(a) Fines and forfeitures ..	20,388	68,341	1,10,658	28,045	2,27,432	2,07,700
(b) Other sources	11,816	7,465	14,328	1,53,409	1,87,018	1,44,840
Total, V ..	32,204	75,806	1,24,986	1,81,454	4,14,450	3,52,540
Grand Total, Presidency ..	7,83,196	10,20,163	14,08,192	9,07,220	41,18,771	42,37,795
EXPENDITURE.						
1. Refunds and drawbacks	8,629	6,603	7,019	2,925	25,176	34,288
A. Conservancy and Works.						
I. Timber and other produce removed from the forests by Government Agency—						
(a) Timber	35,234	6,384	2,741	37,034	81,393	94,509
(b) Firewood, etc.	32,452	37,598	17,676	64,057	1,51,783	4,51,167
(c) Bamboos	24,591	994	148	6,200	31,933	49,120
(d) Sandalwood	..	709	8,707	14,679	24,095	34,603
(e) Grass and other minor produce.	6,392	11,457	235	10,149	28,233	30,857
Total, A-I ..	98,669	57,142	29,507	1,32,119	3,17,437	6,60,256
II. Timber and other produce removed from the forests by consumers, etc.	55,471	32,911	23,291	18,572	1,30,245	1,21,777
III. Confiscated drift and waifwood.	1,912	54	15	107	2,088	1,904
V. Rent of leased forests and payments to shareholders in forests managed by Government.	474	8,000	37	7,701	16,212	18,043
VI. Live-stock, stores, tools and plant—						
(a) Purchase of cattle ..	1,261	1,044	..	9,317	11,622	10,129
(b) Feed and keep of cattle ..	7,549	253	118	74,086	82,006	1,00,989
(c) Stores, tools and plant ..	9,917	9,564	3,253	7,428	30,162	45,573
Total, A-VI ..	18,727	10,861	3,371	90,831	1,23,790	1,56,691

Summary of receipts and expenditure during 1912-13 for each Circle and for the Presidency compiled in the Board's office from Accountant-General's statements—*cont.*

Budget heads.	Northern Circle.	Central Circle.	Southern Circle.	Western Circle.	Grand total, Presidency. 1912-13.	Grand total, Presidency. 1911-12.
1	2	3	4	5	6	7
EXPENDITURE—*cont.*	RS.	RS.	RS.	RS.	RS.	RS.
A. Conservancy and Works—cont.						
VII. Communications and buildings—						
(*a*) Roads and bridges ..	35,887	14,271	35,644	46,601	1,32,403	1,44,618
(*b*) Buildings	49,113	51,816	57,642	48,548	2,07,119	1,95,918
(*c*) Other works	5,605	3,897	3,788	8,495	21,785	23,529
Total, A-VII ..	90,605	69,984	97,074	1,03,644	3,61,307	3,64,065
VIII. Demarcation, etc.—						
(*a*) Demarcation	11,941	7,839	6,455	7,137	33,372	44,193
(*b*) Cost of forest settlement.	828	8,600	813	2,563	12,804	31,844
(*c*) Surveys (1) Local ..	10,626	8,474	6,527	5,317	30,944	24,143
(*c*) Surveys (2) India ..	..	..	..	..	..	737
(*d*) Working-plans	1	— 2	..	— 182	— 183	3,070
(*e*) Sowing and planting ..	75,627	54,758	24,193	15,749	1,70,327	2,07,191
(*f*) Protection from fire ..	57,561	28,088	15,994	29,286	1,30,929	1,28,022
(*g*) Other works	15,124	79,860	73,324	20,722	1,89,030	1,68,272
Total, A-VIII ..	1,71,708	1,87,617	1,27,306	80,592	5,67,223	6,07,472
IX. Miscellaneous—						
(*a*) Law charges	..	651	24	30	705	1,909
(*b*) Other charges	1,608	3,267	757	5,719	11,351	6,462
Total, A-IX ..	1,608	3,918	781	5,749	12,056	8,371
Total, A. Conservancy and Works, including Refunds and Drawbacks.	4,47,803	3,77,090	2,88,401	4,42,240	15,55,534	19,72,807
B. Establishments.						
I. Salaries—						
(*a*) Conservators	22,800	20,843	18,000	20,400	82,043	86,002
(*b*) Superior officers	90,536	83,750	95,871	98,772	3,68,929	3,83,354
(*c*) Subordinate forest and depôt establishments.	1,20,184	1,15,638	1,10,234	1,03,971	4,50,027	4,44,600
(*d*) Office establishments ..	55,245	56,724	51,502	53,630	2,17,101	208,857
(*e*) Deputation allowances ..	71	8	161	28	268	11,796
Total, B-I ..	2,88,836	2,76,963	2,75,768	2,76,801	11,18,368	11,34,609
II. Travelling allowances—						
(*a*) Conservators	3,273	1,995	2,285	2,568	10,121	8,113
(*b*) Superior officers	16,764	10,521	11,986	14,931	54,202	58,193
(*c*) Subordinate forest and depôt establishments.	35,839	31,960	29,711	26,329	1,23,839	1,20,136
(*d*) Office establishments ..	13,001	10,978	8,762	8,271	41,012	40,400
Total, B-II ..	68,877	55,454	52,744	52,099	2,29,174	2,26,842
III. Contingencies—						
(*a*) Rents, rates and taxes ..	1,767	1,528	1,293	2,116	6,704	7,808
(*b*) Official postage and telegrams.	10,230	10,769	12,224	7,294	40,517	40,239
(*c*) Sundries	27,472	23,029	19,023	22,336	91,860	64,136
Total, B-III ..	39,469	35,326	32,540	31,746	1,39,081	1,12,183
Total, B. Establishments ..	3,97,182	3,67,743	3,61,052	3,60,646	14,86,623	14,73,634
Grand Total, Expenditure including Refunds and Drawbacks.	8,44,985	7,44,833	6,49,453	8,02,886	30,42,157	34,46,441
Surplus	— 61,789	+ 2,75,330	+ 7,58,739	+104,334	+ 10,76,614	+ 7,91,354
Total ..	7,83,196	10,20,163	14,08,192	9,07,220	41,18,771	42,37,795

ANNUAL FORM No. 81.

Forest Department, Madras Presidency.

OUTSTANDINGS and Liabilities on account of Contractors and Disbursers for the Forest year 1912–13.

District.	Department Debtor.			Department Creditor.			Balance due.	
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To Department (Outstandings).	By Department (Liabilities).
		RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	
Northern Circle.								
Conservator, Northern Circle.	..	2,466 9 5	2,466 9 5	146 2 4	2,446 0 11	2,592 3 3	125 9 10	..
Ganjām	..	91,067 0 2	91,067 0 2	2,972 5 1	91,009 2 5	93,981 7 6	2,914 7 4	..
Vizagapatam	..	52,676 14 10	52,676 14 10	1,406 6 0	53,067 11 0	54,474 1 0	1,797 2 2	..
Gōdāvari, Upper	..	53,695 1 9	53,695 1 9	4,972 2 6	50,372 2 1	55,344 4 7	1,649 2 10	..
Do. Lower	..	73,398 1 4	73,398 1 4	4,440 9 4	71,022 7 11	75,463 1 3	2,064 15 11	..
Kistna	..	54,617 13 2	54,617 13 2	2,893 12 5	52,236 8 5	55,130 4 10	512 7 8	..
Kurnool, East	..	90,001 4 8	90,001 4 8	2,066 10 4	90,010 8 3	92,077 2 7	2,075 13 11	..
Do. South	..	1,63,568 2 0	1,63,568 2 0	2,707 9 4	1,63,404 4 2	1,66,111 13 6	2,543 11 6	..
Do. West	..	2,48,254 2 9	2,48,254 2 9	4,753 0 11	2,45,953 7 10	2,50,706 8 9	2,452 6 0	..
Total ..	..	8,29,745 2 1	8,29,745 2 1	26,358 10 3	8,19,522 5 0	8,45,880 15 3	16,135 13 2	..
Central Circle.								
Conservator, Central Circle..	..	909 12 11	909 12 11	63 11 10	939 9 0	1,003 4 10	93 7 11	..
Guntūr	..	85,076 3 8	85,076 3 8	1,475 7 11	84,725 4 10	86,200 12 9	1,124 9 1	..
Nellore	..	78,964 7 2	78,964 7 2	1,039 4 9	79,518 3 6	80,557 8 3	1,593 1 1	..
Cuddapah, North	..	62,449 14 2	62,449 14 2	1,561 2 11	61,616 12 6	63,177 15 5	728 1 3	..
Do. East	..	99,260 0 3	99,260 0 3	3,217 4 6	97,494 5 2	1,00,711 9 8	1,451 9 5	..
Bellary	..	1,17,852 9 8	1,17,852 9 8	3,486 14 1	1,17,943 12 11	1,21,430 11 0	3,578 1 4	..
Anantapur	..	90,400 11 9	90,400 11 9	1,931 1 1	90,160 14 1	92 091 15 2	1,691 3 5	..
Chittoor	..	72,505 6 7	72,505 6 7	1,143 12 3	72,788 1 5	73,931 13 8	1,426 7 1	..
Chingleput	..	33,948 7 3	33,948 7 3	571 13 6	34,218 2 3	34,789 15 9	841 8 6	..
Total ..	..	6,41,367 9 5	6,41,367 9 5	14,490 8 10	6,39,405 1 8	6,53,895 10 6	12,528 1 1	..
Southern Circle.								
Conservator, Southern Circle.	..	748 10 2	748 10 2	81 14 0	721 11 3	803 9 3	54 15 1	..
North Vellore	..	50,345 11 7	50,345 11 7	585 4 3	50,502 7 3	51,087 11 6	741 15 11	..
South do.	..	67,039 12 2	67,039 12 2	2,058 7 7	65,946 12 8	68,005 4 3	965 8 1	..
South Arcot	..	49,990 3 7	49,990 3 7	1,293 2 3	49,322 14 11	50,616 1 2	625 13 7	..
North Salem	..	62,055 14 3	62,055 14 3	2,759 10 6	60,670 0 4	63,429 10 10	1,373 12 7	..
South do.	..	59,985 1 10	59,985 1 10	1,612 11 0	60,097 2 9	61,709 13 9	1,724 11 11	..
Trichinopoly	..	65,178 14 11	65,178 14 11	883 6 3	65,965 13 5	66,849 3 8	1,670 4 9	..
Madura	..	1,16,384 11 5	1,16,384 11 5	2,832 1 5	1,18,852 2 9	1,21,684 4 2	5,299 8 9	..
Tinnevelly *cum* Rāmnad ..	..	55,211 2 11	55,211 2 11	1,247 8 11 *129 6 6	56,393 6 0	57,770 5 5	2,559 2 6	.. ..
Total .	..	5,26,940 2 10	5,26,940 2 10	13,483 8 8	5,28,472 7 4	5,41,956 0 0	15,015 13 2	..
Western Circle.								
Conservator, Western Circle.	..	835 5 7	835 5 7	31 14 3	814 14 9	846 13 0	11 7 5	..
South Canara	..	1,19,634 4 5	1,19,634 4 5	2,592 12 2	1,19,551 10 9	1,22,144 6 11	2,510 2 6	..
North Malabar	..	84,283 1 1	84,283 1 1	1,939 4 5	87,275 9 9	89,214 14 2	4,931 13 1	..
South do.	..	68,014 6 10	68,014 6 10	3,218 4 10	66,975 11 9	70,194 0 7	2,179 9 9	..
The Nilgiris	..	1,00,989 11 10	1,00,989 11 10	3,620 0 7	1,04,027 2 7	1,07,647 3 2	6,657 7 4	..
Kollegal	..	72,081 0 3	72,081 0 3	3,493 2 9	71,512 9 3	75,005 12 0	2,924 11 9	..
North Coimbatore	..	88,991 10 6	88,991 10 6	2,431 3 0	89,808 3 9	92,239 6 9	3,247 12 3	..
Central do.	..	51,390 13 11	51,390 13 11	1,323 2 7	51,292 7 11	52,615 10 6	1,224 12 7	..
South do.	..	81,035 11 7	81,035 11 7	3,197 13 3	80,137 11 10	83,335 9 1	2,299 13 6	..
Total ..	..	6,67,256 2 0	6,67,256 2 0	21,847 9 10	6,71,396 2 4	6,93,243 12 2	25,987 10 2	..
Grand Total, Presidency ..	..	26,65,309 0 4	26,65,309 0 4	76,180 5 7	26,58,796 0 4	27,34,976 5 11	69,667 5 7	..

* Rāmnād figure.

ACCOUNTANT-GENERAL'S OFFICE,
MADRAS, 1*st September* 1913.

S. VENKATARAMANAN,
for *Deputy Accountant-General.*

ANNUAL FORM No. 82.

Forest Department, Madras Presidency.

REVENUE received and outstandings on account of Revenue during 1912-13.

District.	Particulars.	Outstandings at commencement of the year.	Value of sales and other revenue during the year.	Total.	Amount realized during the year.	Balance due to the department at end of year.
		RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Northern Circle.						
Direction	Timber and other forest produce.	..	157 0 0	157 0 0	157 0 0	..
Ganjām	Do.	(a) 3 284 8 9	69,363 13 3	72,648 6 0	66,753 0 0	(f) 5,895 6 0
Vizagapatam	Do.	1,513 2 0	50,983 10 9	52,496 12 9	49,247 0 0	(g) 3,249 12 9
Gōdāvari, Upper	Do.	470 13 7	60,586 15 2	61,057 12 9	60,096 0 0	(h) 961 12 9
Do. Lower	Do.	(b) 4,590 5 4	2,08,996 6 8	2,13,586 12 0	1,84,391 0 0	(i) 29,195 12 0
Kistna	Do.	(c)16,807 12 6	1,02,443 11 6	1,19,251 8 0	95,138 0 0	(j) 24,113 8 0
Kurnool, East ..	Do.	(d) 507 11 7	72,793 8 5	73,301 4 0	73,280 0 0	(k) 21 4 0
Do. South	Do.	10,915 11 6	96,943 8 1	1,07,859 3 7	89,002 0 0	(l) 18,857 3 7
Do. West	Do.	130 6 6	1,69,364 5 11	1,69,494 12 5	1,65,132 0 0	(m) 4,362 12 5
	Total ..	(e)38,220 7 9	8,31,632 15 9	8,69,853 7 6	7,83,196 0 0	86,657 7 6
Central Circle.						
Direction	Timber and other produce.	..	..	..	..	..
Bellary	Do.	31,015 13 7	2,16,744 14 7	2,47,760 12 2	1,53,570 0 0	94,190 12 2
Anantapur	Do.	81,479 15 5	4,28,615 6 8	5,10,095 6 1	1,75,417 0 0	3,34,678 6 1
Guntūr	Do.	4,744 14 4	1,79,506 2 1	1,84,251 0 5	1,79,211 0 0	5,040 0 5
North Cuddapah	Do.	3,202 1 7	56,309 14 7	59,512 0 2	57,291 0 0	2,221 0 2
East do.	Do.	6,780 9 1	83,885 5 0	90,665 14 1	84 697 0 0	5,968 14 1
Nellore	Do.	75,479 2 6	1,92,445 13 6	2,67,925 0 0	2,00,382 0 0	67,543 0 0
Chingleput	Do.	5,551 13 11	67,277 1 3	72,828 15 2	64,200 0 0 (n) +233 1 2	8,395 14 0
Chittoor	Do.	23,173 10 9	97,102 15 11	1,20,276 10 8	1,05,395 0 0	14,881 10 8
	Total ..	2,31,428 1 2	13,21,887 9 7	15,53,315 10 9	10,20,163 0 0 (n) +233 1 2	5,32,919 9 7
Southern Circle.						
Direction	Timber and other forest produce.		3 0 0	3 0 0	3 0 0	..
Vellore, North . ..	Do.	20,419 1 9	1,65,591 2 4	1,86,010 4 1	1,46,969 0 0 (o)+ 0 11 8	39,040 8 5
Do. South	Do.	80,797 1 10	2,86,787 11 6	3,67,584 13 4	2,82,376 0 0 (o)+ 33 5 4	85,175 8 0
Arcot, South	Do.	14,826 4 1	2,19,053 3 11	2,33,879 8 0	2,02,454 0 0 (o)+ 7 0 0	31,418 8 0
Salem, North	Do.	16,674 12 1	1,36,944 2 9	1,53,618 14 10	1,36,403 0 0	17,215 14 10
Do. South	Do.	14,035 7 0	1,39,271 9 4	1,53,307 0 4	1,20,294 0 0 (o)+40 0 2	32,973 0 2
Trichinopoly	Do	17,559 6 8	2,00,863 8 8	2,18,422 15 4	1,90,520 0 0 (o)+ 1 8 0	27,901 7 4
Madura	Do.	20,559 2 3	1,91,431 7 8	2,11,790 9 11	1,92,561 0 0 (o)+ 1 6 7	19,228 3 4
Tinnevelly	Do.	15,253 1 11	1,42,495 4 4	1,57,748 6 3	1,36,612 0 0 (o)+ 44 1 5	21,092 4 10
	Total ..	1,99,924 5 7	14,82,441 2 6	16,82,365 8 1	14,08,192 0 0 (o)+128 1 2	2,74,045 6 11
Western Circle.						
Direction	Timber and other forest produce.	..	276 10 11	276 10 11	276 10 11	..
South Canara	Do.	14,573 8 11 — 19 5 11	1,33,690 8 5	1,48,244 11 5	1,43,018 0 0 * 8 0 0	5,218 11 5
Malabar, North	Do.	5,307 7 10	92,572 14 4	97,880 6 2	81,380 0 0	16,500 6 2
Do. South	Do.	2,023 1 0 —1,529 0 0	1,46,441 14 6	1,46,935 15 6	1,45,904 0 0	1,031 15 6
The Nilgiris	Do.	2,128 13 0	75,136 3 3	77,265 0 3	71,288 0 0	5,977 0 3
Kollegal	Do.	50 0 5 — 6 4 0	1,07,628 10 2	1,07,672 6 7	1,07,461 0 0	211 6 7
Coimbatore, North	Do.	0 0 0	1,20,774 0 8	1,20,774 0 8	1,18,035 0 0	2,739 0 8
Do. Central	Do.	13,946 11 2 —509 9 7	67,310 7 7	80,747 9 2	64,990 0 0	15,757 9 2
Do. South	Do.	1,132 8 3 — 9 8 0	1,76,315 3 9	1,77,438 4 0	1,74,868 0 0 * 457 14 0	2,112 6 0
	Total ..	39,162 2 7 — 2,073 11 6	9,20,146 9 7	9,57,235 0 8	9,07,220 10 11 * 465 14 0	49,548 7 9
	Grand total Presidency.	5,06,661 5 7	45,56,108 5 5	50,62,769 11 0	4119,598 11 3	9,43,170 15 9

* Written off the accounts.

(a) Includes Rs. 1,096–11–6 being balance of Revenue on lands not managed by the Forest Department.
(b) Do. Rs. 0–0–5 adjusted in the Board's office last year for which individualwar details are not known.
(c) Excludes Rs. 220–0–0 do. do. do.
(d) Do. Rs. 0–0–10 do. do. do.
(e) Includes Rs. 876–11–1 for which please see notes (a) (b). (c) and (d) above.
(f) Do. Rs. 2,608–0–0 due in 1913–14; Rs. 1,308–3–5 covered by deposit and Rs 483–13–9 relating to lands not managed by the Forest Department. and Rs. 33–12–0 reported to be irrecoverable.
(g) Do. Rs. 2,662–4–9 .. .. ..
(h) Do. ,, 650–0–0 do.
(i) Do. ,, 28,093–4–0 do.
(j) Do. ,, 24,113–8–0 do.
(k) Do. ,, 21–4–0 do.
(l) Do. ,, 14,892–10–8 do. Rs. 174–4–2 do.
(m) Do. do. ,, 110–8–0 do.

(n) Written off in Board's Proceedings, Forest Mis. No. 1795, dated 6th December 1912.

(o) Amounts written off under Conservator's sanction.

Note Western Circle.—Deductions in column 3 are on account of erroneous demands and collections in previous year omitted to be adjusted towards outstandings. Out of the total outstandings of Rs. 49,548–7–9 the amount actually due on or before 30th June 1913 was Rs. 21,001.

ANNUAL FORM NO. 83.

Forest Department, Madras Presidency.

FINANCIAL results of the year 1912-13.

District.	Timber and other produce removed from the Forest by Government Agency.		Other Revenue.		Formation, Protection and Improvement of Forests.	Total.	
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.
Northern Circle.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Ganjām	19,020	24,346	47,746	38,865	40,148	66,766	1,03,359
Vizagapatam	22,464	21,724	26,797	32,018	17,644	49,261	71,386
Gōdāvari, Upper ..	3,021	2,760	57,079	30,188	34,735	60,100	67,683
Do. Lower ..	16,140	7,401	1,68,272	58,757	25,807	1,84,412	91,965
Kistna	9,429	3,761	85,719	27,327	34,655	95,148	65,743
Kurnool, East ..	18,107	10,866	55,188	29,165	52,302	73,295	92,333
Do. South ..	46,064	44,543	42,964	25,678	71,425	89,028	1,41,646
Do. West ..	85,226	61,772	79,960	44,038	96,431	1,65,186	2,02,241
Total ..	2,19,471	7,173	5,63,725	2,86,036	3,73,147	7,83,196	8,36,356 + 8,629
Central Circle.							
Bellary	4,446	1,233	1,49,124	71,556	67,620	1,53,570	1,40,409
Anantapur	4,901	3,448	1,70,516	47,873	49,038	1,75,417	1,00,359
Guntūr	26,253	20,535	1,52,958	41,287	37,142	1,79,211	98,964
Cuddapah, North ..	7,818	6,337	49,473	34,278	23,829	57,291	64,444
Do. East ..	29,896	23,871	54,801	50,214	23,735	84,697	97,820
Nellore	13,233	10,604	1,87,149	50,670	39,201	2,00,382	1,00,475
Chingleput	459	1,237	63,741	23,957	22,615	64,200	47,809
Chittoor	21,580	13,897	83,815	46,709	27,344	1,05,395	87,950
Total ..	1,08,586	81,162	9,11,577	3,66,544	2,90,524	10,20,163	7,38,230 * 6,603
Southern Circle.							
North Vellore ..	1,553	4,795	1,45,417	24,909	27,864	1,46,970	57,568
South do. ..	1,44,797	13,930	1,37,580	30,865	30,043	2,82,377	74,838
South Arcot	20,985	7,099	1,81,470	27,850	25,506	2,02,455	60,455
North Salem	21,389	16,428	1,15,014	32,659	35,815	1,36,403	84,902
South do.	4,413	8,766	1,15,881	30,510	32,183	1,20,294	71,459
Trichinopoly *cum* Tanjore.	6,125	11,522	1,84,395	48,445	31,024	1,90,520	90,991
Madura	9,372	22,187	1 83,189	42,845	65,821	1,92,561	1,30,853
Tinnevelly and Rāmnād	458	6,490	1,36,154	39,526	25,352	1,36,612	71,368
Total ..	2,09,092	91,217	11,99,100	2,77,609	2,73,608	14,08,192	6,42,434 * + 7,019
Western Circle							
South Canara	66,420	53,746	76,632	38,850	17,879	1,43,052	1,10,475
Malabar, North ..	16,833	22,221	64,582	45,449	38,861	81,415	1,06,531
Do. South ..	1,36,838	55,821	8,640	6,025	31,228	1,45,478	93,074
The Nilgiris	37,292	83,236	34,031	22,747	38,711	71,323	1,44,694
Kollegal	73,696	19,601	33,800	14,000	39,815	1,07,496	73,416
Coimbatore, North ..	63,313	34,852	54,756	28,549	45,352	1,18,069	1,08,753
Do. Central ..	1,811	4,058	63,214	26,730	30,551	65,025	61,339
Do. South ..	71,607	33,271	1,03,755	47,016	24,317	1,75,362	1,04,604
Total ..	4,67,810	3,06,806	4,39,410	2,29,366	2,66,714	9,07,220	8,02,886
Grand Total, Presidency	10,04,959	6,56,358	31,13,812	11,59,555	12,03,993	41,18,771	30,42,157

* Refunds and drawbacks.

ANNUAL FORM No. 84.

Forest Department, Madras Presidency.

PART I.

STATEMENT of elephants and other live-stock during 1912–13.

District.	On hand at the commencement of the year.		Number received during the year.	Number disposed of during the year.	On hand at the end of the year.		Total expenditure on maintenance during the year.
	Number.	Value.			Number.	Value.	
1	2	3	4	5	6	7	8
(1) ELEPHANTS.							
Northern Circle.							
		RS.				RS.	RS.
Ganjam	3	5,450	..	..	3	5,450	2,013
Vizagapatam	1	1,500	..	..	1	1,500	1,042
Gōdāvari, Upper	1	900	..	..	1	900	809
Kurnool, West	2	3,100	..	..	2	3,100	1,597
Total ..	7	10,950	..	..	7	10,950	5,461
Western Circle.							
Malabar, North	60	1,10,150	3	45	18	40,500	13,853
Do. South	27	45,900	10	4	33	1,04,200	15,175
The Nilgiris	16	28,050	36	4	48	90,500	18,682
Coimbatore, South ..	17	41,300	5	4	18	40,500	9,874
Total ..	120	2,25,400	54	57	117	2,75,700	57,584
Grand total. (Elephants), Presidency.	127	2,36,350	54	57	124	2,86,650	63,045
(2) OTHER LIVE-STOCK.							
Northern Circle.							
Ganjām	2	50	..	..	2	50	61
Kurnool, South	12	240	22	2	32	1,626	1,986
Total ..	14	290	22	2	34	1,676	2,047
Central Circle.							
Chittoor	14	625	..	12	..	38	194
Southern Circle.							
Vellore, North	2	40	..	..	2	40	103
Western Circle.							
South Canara	72	4,122	..	15	57	3,960	4,582
Malabar, North	4	280	..	2	2	160	451
Do. South	25	1,018	1	1	25	1,013	1,887
The Nilgiris	16	1,000	12	3	25	1,500	3,491
Coimbatore, South	89	5,738	8	21	76	5,439	7,823
Total ..	206	12,158	21	42	185	12,072	18,234
Grand total (Other live stock), Presidency.	236	13,113	43	56	221	13,826	20,578

Statement of elephants and other live-stock during 1912–13—*cont.*

PART II.

District.	Names.	When purchased or otherwise obtained by Government.	Age.	How disposed of.
1	2	3	4	5
		ELEPHANTS GONE OFF DURING THE YEAR.		
		Northern Circle—Nil.		
		Central Circle—Nil.		
		Southern Circle—Nil.		
		Western Circle.		
			YRS.	
Malabar, North.	1. Tippu	Captured on 1st February 1910	15	Sold.
	2. Czarina	Do. 28th January ,,	31	
	3. Sultan	Do. 11th January ,,	5	
	4. Rutna	Do. 28th January ,,	6	
	5. Venus	Do. 5th June ,,	5	
	6. Sunder Lal	Do. 24th February 1911	13	
	7. Aurangazeb	Do. 20th June ,,	6	
	8. Borneo	Born on 20th January 1905	7	
	9. Jessie	Do. 20th October 1903	9	
	10. Reggie	Captured on 11th April 1907	6	
	11. Gunga	Do. 30th May ,,	6	
	12. Janaki	Do. 12th June ,,	7	
	13. Kuroki	Do. 19th February 1905	15	Transferred to South Malabar.
	14. Forester	Do. 15th March 1906	13	
	15. Hyder Ali	Do. 12th March ,,	12	
	16. Kali	Do. 27th June 1908	12	
	17. Port Arthur	Do. 30th January 1905	11	
	18. Saraswathi	Do. 16th April 1911	22	
	19. to 44. Nursery elephants.	....	..	Transferred to the Nilgiris.
	45. Calf (not named).	Captured on 13th March 1913	..	Escaped from the kraal.
Malabar, South.	1. Lydia	Purchased from the Chief Supply and Transport Department in March 1903 for Rs. 1,500.	62	Sold.
	2. Delhi	Captured on 3rd February 1912	1	
	3. Durbar	Do. do.	1	
	4. Nazim Pasha	Born on 23rd November ,,	..	Died.
The Nilgiris.	1. Madan Lal	Captured on 3rd March 1911	14	Died.
	2. Moti Lal	Do. 8th April 1912	4	
	3. Naziruddin	Do. 5th March ,,	5	
	4. Female (not named).	Do. 7th March 1913	30	
Coimbatore, South.	1. Juno	Captured on February 1886	35	Sold.
	2. Mary	Do. on 18th July 1911	1	
	3. Vengoli	Do. on 31st August ,,	2	
	4. Garudachi	Do. on 5th October ,,	36	

ANNUAL FORM No. 85.

Forest Department, Madras Presidency.

ABSTRACT showing the value of stores, tools and plant for 1912–13.

District.	Buildings.				Stores.				Total.				Difference in value.	
	On hand at the commencement of the year.		On hand at the end of the year.		On hand at the commencement of the year.		On hand at the end of the year.		On hand at the commencement of the year.		On hand at the end of the year.		In favour of the year.	Against the year.
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Northern Circle.		RS.		RS.		RS.		RS.		RS.		RS.	RS.	RS.
Direction ..	1	750	1	740	345	2,872	319	3,094	346	3,622	320	3,834	212	..
Ganjām ..	119	49,639	139	58,961	(a)2,427	(b)9,821	(c)2,368	(d)8,544	2,546	59,460	2,507	67,505	8,045	..
Vizagapatam ..	72	9,422	77	10,593	1,184	2,731	1,254	3,081	1,256	12,153	1,331	13,674	1,521	
Gōdāvari, Upper.	117	28,585	117	30,030	2,004	16,782	1,963	15,722	2,121	45,367	2,080	45,752	385	..
Gōdāvari, Lower.	176	68,097	156	52,560	2,266	12,177	1,929	9,521	2,442	80,274	2,085	62,081	..	18,193
Kistna ..	59	8,102	68	7,956	718	7,801	1,609	7,457	777	15,903	1,677	15,413	..	490
Kurnool, East.	18	20,545	20	21,360	2,870	7,364	2,883	7,054	2,888	27,909	2,903	28,414	505	..
Do. South.	30	28,440	49	32,072	2,840	12,458	3,996	11,818	2,870	40,898	4,045	43,890	2,992	..
Do. West.	89	44,123	89	97,352	* 4,683	* 10,608	6,022	13,192	4,772	54,731	6,111	1,10,544	55,813	..
Total ..	681	2,57,703	716	3,11,624	19,337	82,614	22,343	79,483	20,018	3,40,317	23,059	3,91,107	50,790	..
Central Circle.														
Direction ..	..	..	..	..	820	3,109	351	2,904	820	3,109	351	2,904	..	205
Bellary ..	67	43,458	67	60,238	2,546	9,516	2,502	7,861	2,613	52,974	2,569	68,099	15,125	..
Anantapur ..	32	37,068	39	42,457	1,647	6,078	1,809	6,711	1,679	43,146	1,848	49,168	6,022	..
Guntūr ..	47	7,079	40	6,062	1,642	10,576	1,927	11,286	1,689	17,655	1,967	17,348	..	307
North Cuddapah.	40	8,893	46	12,073	1,679	7,151	2,033	7,325	1,719	16,044	2,079	19,398	3,354	..
East Cuddapah.	68	* 15,241	71	17,448	1,109	7,196	1,439	9,862	1,177	22,437	1,510	27,310	4,873	..
Nellore ..	18	18,702	34	27,142	* 58,983	* 48,241	53,103	47,401	59,001	66,943	53,137	74,543	7,600	..
Chingleput ..	45	9,893	45	10,298	1,185 *	5,951 *	1,195	6,356	1,230	15,844	1,240	16,654	810	..
Chittoor ..	53	16,271	52	15,835	1,786	6,163	1,869	7,426	1,839	22,434	1,921	23,261	827	..
Total ..	370	1,56,605	394	1,91,553	71,397	1,03,981	66,228	1,07,132	71,767	2,60,586	66,622	2,98,685	38,099	..
Southern Circle.														
Direction ..	..	..	..	..	1,561	3,135	160	3,030	1,561	3,135	160	3,030	..	105
North Vellore.	41	11,477	41	11,477	1,299	3,874	1,538	5,012	1,340	15,351	1,579	16,489	1,138	..
South do.	44	27,211	52	34,748	3,784	8,411	3,603	8,619	3,828	35,622	3,655	43,367	7,745	..
South Arcot ..	69	18,381	47	20,211	1,510	5,315	1,268	3,819	1,579	23,696	1,315	24,030	334	..
North Salem ..	48	21,189	68	31,725	2,566	7,225	2,084	7,203	2,614	28,414	2,152	38,928	10,514	..
South do. ..	45	14,977	52	17,998	† 2,925	† 8,202	3,037	8,337	2,970	23,179	3,089	26,335	3,156	..
Trichinopoly ..	35	11,044	36	13,247	3,798	15,413	3,749	14,542	3,833	26,457	3,785	27,789	1,332	..
Madura ..	98	56,635	105	66,295	3,128	7,391	3,238	6,668	3,226	64,026	3,343	72,963	8,937	..
Tinnevelly *cum* Rāmnād.	84	45,361	82	43,046	1,773	4,371	1,892	4,614	1,857	49,732	1,974	47,660	..	2,072
Vernacular Training School.	..	..	..	..	317	1,685	316	1,553	317	1,685	316	1,553	..	132
Total ..	464	2,06,275	483	2,38,747	22,661	65,022	20,885	63,397	23,125	2,71,297	21,368	3,02,144	30,847	..
Western Circle.														
Direction ..	1	86	1	82	1,730	7,245	869	6,898	1,731	7,331	870	6,980	..	351
South Canara ..	56	24,091	53	24,399	1,892	11,272	1,950	10,823	1,948	35,363	2,003	35,222	..	141
Malabar, North	68	41,676	71	45,512	2,453	7,060	2,404	7,548	2,521	48,736	2,475	53,060	4,324	..
Do. South.	41	33,629	43	33,849	2,068	6,088	2,190	6,143	2,109	39,717	2,233	39,992	275	..
The Nilgiris ..	62	28,501	65	29,199	1,231	8,956	1,714	10,395	1,293	37,457	1,779	39,594	2,137	..
Kollegal ..	28	18,927	29	18,917	1,390	6,631	1,483	6,241	1,418	25,558	1,512	25,158	..	400
Coimbatore, North.	60	43,304	62	46,636	2,559	10,687	2,850	10,418	2,619	53,991	2,912	57,054	3,063	..
Do. Central	56	15,124	57	20,620	7,646	9,287	7,578	8,828	7,702	24,411	7,635	29,448	5,037	..
Do. South.	63	28,992	63	32,048	16,519	38,988	8,564	36,338	16,582	67,980	8,627	68,386	406	..
Vernacular Training School.	..	..	..	..	408	2,773	248	1,077	408	2,773	248	1,077	..	1,696
Total ..	435	2,34,330	444	2,51,262	37,896	1,08,987	29,850	1,04,709	38,331	3,43,317	30,294	3,55,971	12,654	..
Grand Total, Presidency.	1,950	8,54,913	2,037	9,93,186	151,291	3,60,604	139,306	3,54,721	153,241	12,15,517	141,343	13,47,907	1,32,390	

* Revised figure. † As revised by the Collector.

(a) Excludes 499 items belonging to the Parlakimedi Wahabs.
(b) Do. Rs. 2,050 being the cost of 499 items belonging to the Parlakimedi Wahabs.
(c) Do. 566 items belonging to the Parlakimedi Wahabs.
(d) Do. Rs. 2,265 being the value of 565 items belonging to the Parlakimedi Wahabs.

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

READ—the following paper :—

Proceedings of the Board of Revenue (Land Revenue), Forest No. 236, dated 18th November 1913.

The Hon'ble Mr. R. C. C. CARR, I.C.S.

The Board submits to Government the progress report of forest administration in the Madras Presidency for the year ending with 30th June 1913.

CONSTITUTION OF STATE FORESTS.

ALTERATION IN AREA.

2. Nearly 48 square miles, chiefly in Central Coimbatore and to a smaller extent in Vizagapatam, North Salem and Tinnevelly, were constituted reserved forests during the year. There were also the following changes in area : There was an increase of 6 square miles by reason of correct computation of areas in Nellore and Anantapur and of 2 square miles on account of the adoption of the areas given in the Survey of India maps in South Canara and Central Coimbatore, while there was a decrease of 9 square miles by disafforestation of forest areas in Anantapur, of 3 square miles by the adoption of the Survey of India figures in Lower Gōdāvari and of 3 square miles by correct computation of areas in Nellore. The net result of these changes was an increase of 41 square miles in the total area of reserved forests which stood at 18,641 square miles at the close of the year.

The area of reserved lands fell from 838 square miles to 825 square miles. About 110 square miles were notified under section 4 of the Forest Act chiefly in the districts of Upper Gōdāvari and Central Coimbatore and 25 square miles were added by the adoption of the Survey of India figures in Kollegal, while 48 square miles were notified under section 16. Two square miles were excluded at settlement and 98 square miles were transferred to unreserved land in South Canara. In the Parlākimedi maliahs, four blocks of an aggregate area of 12,886 acres in the Parlākimedi range and one block of an area of 18,000 acres in the Chandragiri range were added to the reserved lands by the Collector. The total number of blocks selected up to the end of the year under report in both the Parlākimedi and Chandragiri ranges was 16, aggregating 138 square miles.

FOREST SETTLEMENT.

3. It will be seen from appendix B that 656 square miles notified under section 4 of the Forest Act remained to be notified under section 16 of the Forest Act at the end of the year. The settlement of 457 square miles has been practically completed, leaving a balance of 199 square miles still to be done. As in previous years, settlement work was mostly carried out by Revenue Divisional Officers. The Special Deputy Collector appointed to revise the boundaries of some of the existing reserves in Madura continued his work throughout the year and Government have sanctioned the retention of his services for a further period of two years for the investigation of certain reserves in Kodaikānal range. In G.O. No 770, Revenue, dated 14th March 1913, Government sanctioned the employment of a Special Deputy Collector for forest settlement work in Coimbatore and he has prepared the revised draft notification under section 16 for the Madeshwaramalai block in Kollegal having an area of 246 square miles.

DEMARCATION.

4. The total length of boundaries at the close of the year was 36,952 miles (or 433 miles less than in the previous year), of which 1,777 miles do not require artificial demarcation, 34,212 miles were previously demarcated with artificial boundary marks, and 275 miles were newly done during the year under review against 522 miles in 1911-12, leaving 963 miles chiefly in Ganjām, Madura and Kollegal still to be demarcated. The forests in Madura and Coimbatore are being demarcated in accordance with the verification of boundaries by the Special Deputy Collectors appointed for the purpose, and considerable progress was made during the year. The Conservator, Central Circle, reports that permanent demarcation of reserves in the circle is capable of much improvement and that the matter is receiving his attention.

The length of old boundaries repaired during the year was 19,314 miles against 17,583 miles in the previous year and the length of boundaries cleared free of cost by subordinates rose from 10,293 miles to 13,233 miles. The progress made was satisfactory.

Excluding Rs. 8,544 spent on the demarcation of boundaries in connection with dupati survey in Upper Gōdāvari division, the average cost per mile of fresh demarcation rose from Rs. 24-6-3 to Rs. 35-12-1, while the cost of repairs fell from Rs. 2-8-3 to Rs. 2-7-5. The increased rate for permanent demarcation was mainly contributed by Madura and Kollegal where the boundaries are substantially demarcated in accordance with the verification of forest boundaries corrected by the Special Forest Settlement Officers.

SURVEYS.

5. The Survey of India Party No. VII surveyed on the 2 inch = 1 mile scale two reserves in Kollegal aggregating 11·61 square miles. The index maps undertaken for Upper Gōdāvari division have been published, while those for the remaining districts of the Northern Circle are reported to be under different stages of completion. The Bhadrāchalam dupati survey was brought to a close during the year, 89 villages having been completed. The survey officer deputed to survey the boundaries of estates newly leased out on the Anamalais worked for about two months and had then to stop further work on account of the approach of the monsoon. He will resume and complete the work during the present cold weather. The departmental surveys of importance carried out during the year were the survey of 92 miles in Chokkapad forests in Ganjām, alignment of 115 miles of a 700-ft. level line in Upper Gōdāvari division and the survey of 65 miles of boundaries of reserved forests in Kollegal. Miscellaneous work such as survey of coupes, alignment of roads, cutting of fire lines, and verification of boundaries and preparation of stock and working plan maps was done by departmental surveyors. The Special Forest Map Officer Mr. Descubes prepared the reference maps of the forest divisions of Kurnool, Bellary, Anantapur, North Malabar, South Arcot, South Vellore and of part of the map of Trichinopoly *cum* Tanjore. The quality of the work is stated by the Conservator, Southern Circle, to be good and the progress satisfactory. The Government of India have sanctioned his re-employment up to the end of February 1915 for the purpose of completing the revision of the reference maps of the Presidency.

MANAGEMENT OF FORESTS.

(1) REGULATION OF MANAGEMENT.

Working Plans.

6. During the year working plans for 390 square miles were sanctioned and plans were either under preparation or revision for 2,368 square miles. As observed in the reviews of previous years, this important subject has not received sufficient attention owing to a dearth of officers. This question is now engaging the attention of the Board and the Government. As a beginning Mr. C. C. Wilson, Assistant Conservator of Forests, has just been posted as Working Plans Officer, South Vellore, to deal with sandalwood on the Javadi hills in which Government possess a

very valuable property. The working plan for the Marrigudem range of Upper Gōdāvari was approved tentatively during the year subject to report on its working and to revision if necessary after five years. The preliminary working plan for the forests of the Bhadrāchalam range compiled by the District Forest Officer, Upper Gōdāvari, was found to be too elaborate and was returned to the Collector of Gōdāvari for the preparation of a purely tentative plan. Revised working plans for the Yerramalais and for the Beypore tope in South Malabar and a preliminary working plan for a portion of Gundlabrahmeswaram range were sanctioned during the year. The working plan for the coast range in South Arcot district referred to in the previous year's review has been abandoned as Government have approved of the Board's proposal to get rid of the casuarina planting business and leave it to private enterprise. Steps are being taken to have the existing casuarina reserves disafforested and the land and standing stock sold. The plantations in South Arcot have been disafforested already and similar steps are being taken for the disposal of the casuarina plantations in Nellore district. In Kurnool South and Vizagapatam the preparation of plans was held in abeyance pending receipt of orders on the Forest Committee's report. The Conservator of the Central Circle in which a regrettable want of control over working plans was noticed in the previous report, points out that control is improving but that much remains to be accomplished, and that many of the existing plans need thorough revision. In North Salem M.R.Ry. J. Sadasiva Ayyar, Avargal, Extra Assistant Conservator of Forests, was posted during the year for preparation of working plans and is said to have practically completed a working plan for Dharmapuri range (area 164½ square miles).

7. The annual plans of operations were generally adhered to.

(2) Communication and Buildings.

8. The following statement compares the expenditure during the year on the construction and maintenance of roads, bridges and buildings in the four circles with that of the preceding year :—

—	Roads and bridges		Buildings.	
	1911-1912.	1912-1913.	1911-1912.	1912-1913.
	RS.	RS.	RS.	RS.
Northern Circle	41,561	35,587	59,637	49,113
Central Circle	4,473	14,271	53,534	51,816
Southern Circle	36,076	35,644	32,967	57,642
Western Circle	62,508	46,601	49,780	48,548
Total	1,44,618	1,32,403	1,95,918	2,07,119

The total expenditure on roads and bridges fell by Rs. 12,215 but that on buildings rose by Rs. 11,201. There was a marked increase in expenditure incurred in roads and bridges in the Central Circle and in that incurred on buildings in the Southern Circle. Without roads and proper buildings in the way of subordinates lines and rest-houses, the proper inspection, protection and working of the forests is almost impossible. Expenditure sensibly invested on such works should generally repay itself in a few years' time. Having due regard to progress and improved efficiency of working, the Board fears it is not possible to advocate any serious curtailment of expenditure at present under either of these important heads. In his inspection note of January last, the Inspector-General of Forests to the Government of India has, while deprecating wasteful and objectless expenditure on roads and buildings, at the same time emphasized the necessity for liberal grants for all well-considered schemes if the forests in Madras are to be properly developed and brought under an efficient system of control.

The necessity for care in selecting objects on which money can be usefully spent has been impressed upon Conservators. The tramways in Nellore and South Coimbatore worked at a profit. The proposed Wynaad tramway was abandoned. A scheme for extracting timber from the Tekkadi leased forests and from the Government reserves on the slopes of the Anamalais was investigated by a special

officer in conjunction with an officer deputed for this purpose by the Cochin Darbar. The idea was to utilize the Cochin forest tramway which is now working not far from the forests in question. It was found, however, that the produce of these areas could be more profitably extracted on the Coimbatore side and a scheme is now under investigation for a tramway and inclined plane to provide the necessary outlet.

The telephone lines erected in South Coimbatore were most useful and about 400 messages were sent during the year. It is interesting to note that almost the first message saved 24 hours' delay in taking an elephant out of a pit.

Miscellaneous works.

9. The expenditure under this head decreased from Rs. 23,529 to Rs. 21,785. The works consisted as usual in fencing compounds and reserves, construction of and repairs to tanks and wells. In Trichinopoly, a dam was built to improve the water-supply at Kulivalavu. In North Malabar, temporary and permanent dams were constructed to train two streams for floating timber, fuel and bamboos. In the Nilgiris a pipe line for supply of water to Kargudi camp was aligned and pipes and fittings were purchased.

(3) PROTECTION OF FORESTS.

10. The following table compares the forest offences reported during the year with those in 1911–12 and with the average of the three years ending 1911–1912 :—

—	Injury to forests by fire.		Unauthorised felling and removal of forest produce.		Unauthorised grazing.		Other offences.		Total.		Average. for three years ending 1911-1912.
	1911-1912.	1912-1913.	1911-1912.	1912-1913.	1911-1912.	1912-1913.	1911-1912.	1912-1913.	1911-1912.	1912-1913.	
A. Cases taken to court ..	84	65	3,386	3,526	1,587	1,583	342	321	5,399	5,495	4,993
B. Cases compounded ..	66	63	14,142	15,104	6,676	6,829	746	734	21,630	22,730	20,158
C. Undetected cases	1,119	949	438	524	381	179	28	16	1,966	1,667	1,769
Total ..	1,269	1,077	17,966	19,154	8,644	8,591	1,116	1,070	28,995	29,892	26,920

The total number of offences increased from 28,995 to 29,892. The number of cases taken into Court was practically the same as last year, while cases compounded accounted for the increase. This occurred under "unauthorised felling" while there was a decrease under all the other heads. Under "injury to forests by fire" the number of offences decreased by about 15 per cent. The decrease occurred mainly in Chittoor, North Vellore and South Vellore. In Chittoor it is reported to be due to closure of certain reserves to grazing on account of heavy fires, while in North and South Vellore no explanation has been given for the decrease. The number of offences of illicit felling or removal of forest produce increased by about 6 per cent. The increase occurred chiefly in Kurnool South and West, Bellary, Cuddapah North, Cuddapah East, Chingleput, South Arcot, North Salem, South Canara and Coimbatore Central. In Nellore, Chittoor, Madura and Tinnevelly however there was a decrease. The marked increase in Kurnool South and West is ascribed to the fact that professional thieves were infesting the Nallamalais near Atmakur, and the Conservator states that a special enquiry is being held in connection with this. It is interesting to note that the increase in East Cuddapah is partly due to the presence there of the Vernacular Training School for five months in the year, the students of which detected 26 cases. The increase in Bellary and Central Coimbatore is attributed to better supervision and that in Chingleput to the preparation of separate offence reports for each individual where more than one offender was apprehended in one place and at one time. The increase in South Canara was due to the theft of sandalwood of which the rise in price has been recently very noticeable. The decrease in Chittoor and Nellore is attributed to favourable season, but that in Madura and Tinnevelly has not been explained. The slight decrease in the number of offences of illicit grazing and in the number of other offences does not call for any special remarks.

11. The percentage of cases undetected, compounded, and taken into Court, to cases reported, was 5·6, 76·04 and 18·4 against 6·7, 74·7 and 18·6. The total number of cases disposed of by Courts rose from 5,363 to 5,968 and the percentage of acquittals to cases prosecuted decreased from 10·6 to 10·3. The punishments inflicted by the Magistrates were generally adequate.

The number of cases compounded by District Forest officers or Revenue Divisional officers rose from 19,274 to 20,910 and the amount of compensation fees realized likewise rose from Rs. 1,69,461 to 1,94,940. The average fee per case was Rs. 9–5–2 against Rs. 8–12–8 in the previous year.

12. The Conservator, Northern Circle, has not reported how the rules laid down by Government in G.Os. No. 1990, Revenue, dated 13th June 1910, and No. 3958, Revenue, dated 14th December 1910, for the guidance of Forest officers in compounding offences of illicit grazing worked during the year. The rules are reported to have been observed in the other circles. The Government has recently accepted the recommendation of the Forest Committee to amend these rules by fixing a maximum of Rs. 100 for any one case irrespective of the number of animals involved.

The closure of forests to grazing as a punishment for systematic offences on a large scale was not deemed necessary in any district except in Kurnool West and North and South Coimbatore.

13. Rewards amounting to Rs. 446–8–0 were granted to informers and forest subordinates. The figure for the Central Circle has not been furnished. The Conservator, Southern Circle, points out that it will be of advantage if rewards are more frequently granted, for instance in Salem, for the detection of goat-browsing in reserves. The matter is engaging the Board's attention.

Rewards were granted to Chenchus on the Nallamalais for protecting a large area of the forest round their gudems from fire. The treatment of these hill people requires much tact and patience.

14. Separate statistics of the offences in unreserved lands has this year been furnished for all the circles.

Protection from fire.

15. The system of fire protection adopted in most districts was the same as in the previous years, viz., the clearing of exterior and interior fire lines and patrol by fire watchers. In South Kurnool, it is reported that a fire line in Sirvel range was given on contract to be cut free of cost to Government in return for which the contractor was allowed to take free the produce resulting from the operations. The work is reported to have been well done and to have reduced fires in that range. The system of burning large areas of forests in strips of varying width in order to secure protection to the remainder was discontinued both in North and East Cuddapah and it is proposed not to resort to it again. The total area over which special protection was attempted was 6,037 square miles against 5,758 square miles in the previous year. Five hundred and forty-five square miles of the area attempted to be protected were burnt, the percentage of failure falling from nearly 11 to 9·03 per cent. The cost per square mile successfully protected fell to Rs. 22–3–0 from Rs. 22–13–1 in the previous year. The Conservator, Southern Circle, remarks that the origin of most of the fires reported is doubtful and that satisfactory detection is seldom made. He therefore advocates the grant of liberal rewards for good work in detecting cases of fire. The Board agrees that useful results might thereby be attained. The measures taken to secure the co-operation of the hill tribes such as the Khonds in Ganjām, Chenchus in Kurnool and the Malayalees in the Javadis to protect the forests from fire in return for rewards and grazing concessions are reported to have been eminently successful. In addition to the areas under special protection, the ordinary staff attempted to protect 9,326 square miles against 9,315 square miles in the previous year of which 8,869 square miles were successfully protected. The Conservator, Western Circle, observes that the registration of fires in these areas continued to be untrustworthy and that several fires were not reported; he considers that improvement cannot be hoped for until the establishment is strengthened

16. The following statement compares the number and origin of the fires which occurred during the year with those of the previous year :—

—	1911-1912.		1912-1913.	
	Number of fires.	Area burnt in acres.	Number of fires.	Area burnt in acres.
Fires originating in departmental fire conservancy operations	57	3,808	45	23,601
Fires crossing the exterior fire lines	177	215,707	166	52,494
Fires due to carelessness or accident	338	150,428	318	59,117
Fires originating from intention or malice ..	461	223,450	260	100,478
Fires due to unknown causes	660	345,251	637	428,379
Total ..	1,693	938,644	1,426	664,069

The number of fires and area burnt were both much less than in the previous year. The area burnt through carelessness in burning fire lines departmentally increased, which is unsatisfactory. It is observed that 74 per cent. of the total area burnt was in the Northern Circle, principally in *Upper Gōdāvari*, *Kurnool East and West*. In Upper Gōdāvari large areas were burnt; but it is reported that correct statistics were not furnished owing to the Nugur and Cherla Range officers not furnishing fire occurrence reports for 82,570 acres, and that the delinquents will be suitably dealt with. The fires in the two Kurnool divisions were due to the fact that the whole of the Nandyal range was burnt over owing to the unsettled state of the fire line boundary between the two divisions. Arrangements have since been made to settle this question in a practical way. As in the previous year, the origin of a large proportion of fires could not be ascertained. The punishment of closure of reserves to grazing for incendiarism was resorted to in Kurnool, Anantapur, East Cuddapah, Tinnevelly, Coimbatore North and Central, and Kollegal.

Protection from cattle.

17. Three thousand one hundred and sixty-three square miles or 16 per cent. of the total area of reserved forests and reserved lands (19,466 square miles) were closed to all animals throughout the year and 280 square miles for part of the year, against 2,778 square miles and 266 square miles respectively in the previous year. Six hundred and eighty-three square miles of reserved forests and lands were open to goats against 799 square miles open last year, and no goats were admitted in either reserved forests or reserved lands in Vizagapatam, Gōdāvari Upper and Lower, the three divisions of Kurnool, South Vellore, South Arcot, South Salem, Trichinopoly, Tinnevelly or any of the districts of the Western Circle. Goats alone were excluded over an area of 14,752 square miles and goats and sheep over 489 square miles against 16,256 square miles and 294 square miles respectively last year In South Coimbatore alone, 179 square miles were closed to both goats and sheep in accordance with the provisions of the grazing scheme for Udamalpet taluk. It is reported that, as a result of a conference held with the local ryots regarding the working of the Udamalpet grazing scheme, it was found that they had no real grievance and that the restrictions imposed by the scheme are beneficial to them. The Government has recently accepted the recommendation of the Forest Committee that goats should be excluded from all reserved forests. In Government Order No. 1600, Revenue, dated 30th May 1913, Government ordered the closure to grazing of the whole of the southern slopes of the Jarugumalai Hills in the Salem district in order to avoid the contamination of the water-supply in the neighbourhood.

The number of cattle impounded fell from 200,161 to 196,108, but the total number of animals admitted to grazing on payment rose from 3,552,777 to 3,890,747. The number of buffaloes, bullocks and cows and sheep licensed increased by 18,851, 135,434 and 188,971, respectively, but the number of goats fell by 5,066. The number of buffaloes and cows admitted to grazing free in Upper Gōdāvari is now shown as 701 and 16,638 against 4,074 and 48,288 in the previous year and the decrease has not been explained. As remarked in the previous year's review, no progress

could be made in the preparation or sanction of schemes for the regulation of grazing, pending the orders of Government on the report of the Forest Committee. These orders have now been received and this subject will now be taken up.

Protection against injuries from natural causes.

18. The borer *Arbela tetraonis* continued its depredation in the Agastinowgam plantation in Ganjām though the spread of root fungus *Trichosporum vesiculosum* has practically stopped there. The young teak plantations in South Malabar were attacked by *Hybloea* and by *Pyrausta.* It is reported that as an experiment a light ground fire was burnt through some of the areas affected and that thousands of caterpillars were thus destroyed. The leaf pest continued to defoliate teak in Kurnool East and West. Spike continues to spread in sandalwood areas in Kollegal in spite of the removal of the spiked trees, and invaded two new sandalwood areas in North Coimbatore necessitating the marking of 8,000 dead spiked trees in Hassanur coupes II and III. Damage was caused to coppice reproduction of *Pterocarpus marsupium* in Tinnevelly by sambhur. Lantana was eradicated on a small scale in Tinnevelly. The same pest gave special trouble in the Tekkadi leased forests in South Coimbatore, in Ramandrug in Bellary and in Horsleykonda in Chittoor. Another pest, prickly-pear, was specially troublesome in Madura and North Salem. The parasite *Loranthus longiflorus* attacked the *Albizzias* and *Melias* in Perambalūr and Udaiyārpālaiyam ranges in Trichinopoly district. The Board of Forestry at a meeting held in Dehra Dun in March 1913 discussed the question of the removal of lantana and prickly-pear and came to the conclusion that, in order to reduce the cost of eradicating these pests, steps should be taken by the Forest Research Institute to ascertain if products of economic value, such as pulp or acetine, are obtainable from them. This resolution has already been communicated to Conservators.

(4) Sylviculture.

Natural reproduction.

19. Reproduction from seedlings was satisfactory where conditions were favourable. It was poor in South Kurnool, Trichinopoly (except in the inaccessible parts of the higher slopes of the Pachamalais), the Nilgiris, and Central Coimbatore (except in the coupes recently felled and closed to grazing and the Attapadi valley). Reproduction of red sanders from seed and coppice was excellent in both divisions of Cuddapah. Sandalwood is spreading well in Bellary and South Salem, but its regeneration in North Salem was poor owing to the failure of south-west monsoon; it seeded well in Chittoor, but the seedlings either died back or were destroyed by cattle. Root suckers system of reproduction of sandal has proved a failure in South Vellore and is now supplemented by sowing seed in the hollow left by the uprooted tree and the results are being watched. From districts in the Southern Circle where sandal exists it is reported that the species is steadily spreading through the agency of birds. Teak seeded profusely in North Vellore; its reproduction by coppice was fair in Muliar fuel coupe of South Canara, but absent elsewhere in the district; in North Malabar teak reproduction by root suckers improved, but seedlings were scarce. Reproduction by coppice was generally good in areas protected from fire and grazing.

Artificial reproduction.

20. One thousand two hundred and forty-six acres were added and 1,805 acres excluded from the area of regular plantations, leaving a net decrease of 559 acres against an increase of 2,413 acres in the previous year. The additions were chiefly to the casuarina plantations in Gōdāvari Lower and Guntūr, the teak plantations in West Kurnool and South Malabar, the Moka plantations in Bellary and the pine plantations in the Gundar valley. There were no additions to the taungya plantations during the year. Cultural operations were carried on over 21,037 acres at a cost of Rs. 26,708 against 23,203 acres at a cost of Rs. 35,940 in the previous year, the decrease occurring mainly in the Southern and Western Circles. The operations consisted as usual of ploughing, sowing, dibbling in seeds and putting out seedlings and cuttings of various species and except in special circumstances

gave little encouragement. In his note on forest revenue and expenditure in Madras, Mr. Beadon Bryant has suggested that more economy should be effected under cultural operations, that attempts to re-stock hard and infertile soil artificially on any large scale should be abandoned and that such degraded areas as it is advisable to retain as reserved forests should be rigidly protected. This represents exactly the policy which the Board itself has been endeavouring to impress on Conservators for some years past.

Operations for the improvement of growing stock.

21. The operations undertaken during the year for the improvement of growing stock consisted, as in previous years, of improvement fellings, thinnings, fencing, creeper cutting, removal of inferior species, dead and dying trees, parasities and noxious growth and weeding. In Bellary and Chittoor some bunding of streams was undertaken but the majority of the bunds in the former district have been washed away as the operations were not conducted properly.

Experiments.

22. Successful experimental cultivation was carried on in the following districts :—

Sandal in Vizagapatam, red sanders in North and South Vellore, South Arcot, Ganjām, Kurnool West and in the Conservator's bungalow compound at Waltair, *Swietenia mahogani* in North Vellore, South Vellore, Trichinopoly, Madura, East Cuddapah, Nellore, South Canara, North and South Malabar, Nilgiris and Central Coimbatore, *Dalbergia sissoo* in Bellary and South Arcot, *Cedrela odorata* in South Malabar and Coimbatore, *Acacia auriculiformis* in North Vellore, Salem, North Cuddapah and Nellore, and *Landolphia florida* in South Malabar. Experiments with *sesbania aculeata*, which is required for leaf manure, have been stopped in the Central Circle, as suggested by the Board, and this work will in future be left to the Agricultural Department.

(5) EXPLOITATION.

(a) System of management.

Major produce.

23. The various methods of the exploitation of major produce were, as in previous years, clear or regeneration fellings, thinnings, selection fellings, improvement fellings, and coppice fellings. Clear or regeneration fellings were carried on mostly in Bellary, Lower Gōdāvari, Kistna and Kurnool West. Thinnings were carried out in the teak plantations in South Malabar. Fuel in some of the coupes in Lower Gōdāvari and Kistna and bamboos in Kistna and Kurnool West was removed under the same system. Selection fellings were carried out as usual in timber coupes or where it was found necessary to eliminate dead, diseased and suppressed trees. Bamboos were also worked by selection felling in North Vellore, South Arcot and South Salem. Improvement and coppice fellings were undertaken to a large extent in most districts. Unregulated fellings under the permit system were made in some unreserves ; in reserves this antiquated system was chiefly confined to the extraction of bamboos in North Malabar, South Malabar, Kollegal, the Nilgiris and South Coimbatore, of palmyra trees in Kurnool East and West, of small timber and fuel in the Rampa forests of Lower Gōdāvari and in the Nilgiris, of cinnamon leaves and some firewood in South Canara.

Minor produce and fodder grass.

24. Minor produce was generally leased out. The manufacture of catechu in South Canara, and collection of miscellaneous produce in parts of the Nilgiris, South Coimbatore, Kollegal and North Coimbatore were carried out by departmental agency. Manure leaves in North and South Vellore and South Arcot were removed on the permit system and permits were also issued in several districts for the removal of stones, gravel, etc. In Nellore, palmyra trees and leaves, etc., were granted for the construction of houses to the criminal tribes at Kalichedu and Kavali settlements. In Guntūr, South Kurnool, Madura, South Malabar and Coimbatore permits were

issued for fodder grass ; it was leased out in Lower Gōdāvari, Kistna, North Cuddapah, Tinnevelly and parts of Guntūr and Central Coimbatore. Ryots were allowed to cut and remove grass free from reserves in Vizagapatam, Gōdāvari Lower, Kistna and three Kurnools, Bellary, Anantapur, North and East Cuddapah, Chittoor, North Vellore and parts of South Canara and the Nilgiris. There was no free removal of grass from any of the reserves in Chingleput, Nellore, South Arcot, North and South Salem, Trichinopoly, Malabar and Coimbatore. In Bellary, Mr. Hewes cut and removed 100 tons of grass against 475 tons in the previous year, and the Military Department took 839 tons against 971 tons in the previous year.

Hay-making.

25. Experimental operations in hay-making were undertaken in Guntūr and East Cuddapah and a detailed report on the subject has been promised. Hay was collected in small quantities in South Canara, South Kurnool, North and South Salem and Trichinopoly. In South Canara and South Kurnool the hay was used for feeding Government bullocks ; elsewhere it was sold. In Central Coimbatore the preparation of hay was left to private agency, and in North Vellore to the Military Department on payment of a royalty of Rs. 2 per ton on hay removed.

Grazing.

26. The revenue from grazing and fodder grass, Rs. 6,91,509, was greater than in the previous year by Rs. 59,494. Taking the districts individually, the revenue under this head increased noticeably in Gōdāvari Lower, Kistna, Kurnool East, Bellary, Nellore, Vellore, North and South, North Salem and Trichinopoly. In Kurnool East and Lower Gōdāvari the increase was due to large number of foreign cattle taken to the Nallamalais and Rampa. The increase in Kistna has not been explained ; in Nellore it was due to larger areas being open to grazing, in Bellary to the favourable season while in the remaining districts, better supervision is the reason put forward.

(b) Agency of exploitation.

27. The subjoined table compares the outturn through all agencies of timber, fuel, bamboos and minor produce with that of the preceding year :—

Agency of exploitation.		Timber including sandalwood in cubic feet.		Fuel in cubic feet.		Bamboos in number.		Minor produce (including grass and grazing) gross value in rupees.	
		1911-12.	1912-13.	1911-12.	1912-13.	1911-12.	1912-13.	1911-12.	1912-13.
		C. FT.	C. FT.	C. FT.	C. FT.	NO.	NO.	RS.	RS.
By Government agency.	Northern Circle.	370,195	323,766	4,007,005	1,460,144	6,135,885	4,046,737	14,922	10,628
	Central Circle.	87,769	67,011	3,518,918	1,417,886	213,926	88,338	11,934	18,036
	Southern Circle.	43,296	32,535	2,856,449	354,048	199,304	4,282	1,066	433
	Western Circle.	281,316	286,927	2,175,521	2,071,673	122,914	206,909	24,496	25,647
	Total ..	782,576	710,239	12,557,893	5,303,751	6,672,029	4,346,266	52,418	54,744
By purchasers.	Northern Circle.	637,198	(a)1,262,711	1,112,102	2,991,914	13,927,560	10,668,814	2,65,593	2,43,732
	Central Circle.	1,054,247	1,396,145	1,549,646	4,208,548	1,530,595	1,683,367	6,68,445	9,41,935
	Southern Circle.	1,051,227	983,229	7,463,960	6,259,365	20,600,461	12,660,892	4,25,424	5,07,871
	Western Circle.	259,715	300,788	1,284,676	2,068,520	4,317,539	4,818,838	1,29,111	86,225
	Total ..	3,002,387	3,942,873	11,410,384	15,528,347	40,376,155	29,831,911	14,88,573	17,79,763
By right holders.	Northern Circle.	807	807	154,806	154,806	12,293	12,293	24,137	23,582
	Central Circle.		..	..	..	..	..	110	151
	Southern Circle.	..	..	20	20	.	..	2,431	820
	Western Circle.	51,747	33,386	33	28	1,371	1,392	739	721
	Total ..	52,554	34,193	154,859	154,854	13,664	13,685	27,417	25,274
By free grantees.	Northern Circle.	40,397	22,643	560	..	140,825	47,670	102	107
	Central Circle.	57,715	58,117	41,568	20	24,760	24,950	372	1,836
	Southern Circle.	50,672	32,276	1,852	104,301	24,970	26,441	531	10,316
	Western Circle.	11,053	6,062	636	975	13,056	9,045	98	417
	Total ..	159,837	119,098	44,616	105,296	203,611	108,106	1,103	12,676
Grand Total, Presidency ..		3,997,354	4,806,403	24,167,752	21,092,248	47,265,459	34,299,968	15,69,511	18,72,457

(a) Corrected in the Board's office.

28. The quantity of timber extracted and the value of minor produce collected increased while the quantity of fuel and the number of bamboos cut decreased. Timber extracted by Government agency decreased by about 72,000 cubic feet and that by purchasers increased by about nine lakhs and fifty thousand cubic feet. The decrease in the outturn through departmental agency occurred in all the circles except the Western. In the Northern Circle, the fall is ascribed to the substitution of contract for departmental agency, in the Central to restricted fellings in Bellary, lack of demand in Guntūr, and to the temporary cessation of felling of red sanders in Chittoor, and in the Southern to stoppage of timber operations in North and South Salem divisions pending preparation of working plans. In the Western Circle, the increase in departmental working of timber was chiefly in North Malabar due to the felling of Begur coupe and in the Nilgiris to the large quantity of timber felled in the Mudumalai working circle. The larger employment of contractors in place of departmental extraction, larger removal from darkhast lands in all the circles except the Northern, and the inclusion in the accounts of the outturn of unreserved land in Kollegal omitted in the previous year, accounted for the increased extraction of timber by purchasers. The quantity of fuel extracted by departmental agency decreased in all the circles and that cut and collected by purchasers increased in all the circles except the Southern. The transfer of the exploitation of fuel from departmental to private agency accounts for the increase. In the Southern Circle, the decrease was due chiefly to the fact that the contractors failed to complete fellings in their coupes. The Board is of opinion that on the whole a great advance has been made in the extension of the system of contract fellings and extraction of fuel.

29. The number of bamboos extracted by departmental agency decreased by about 2,325,763 the decrease being spread over all the circles except the Western. The number removed by purchasers likewise decreased from 40,376,155 to 29,831,911, and the Northern and Southern Circles contributed to this decrease. The decrease in the former circle has not been explained, while in the latter it is said to be due to short work by contractors and to suspensions of contracts for irregular work in South Vellore and North Salem.

30. The value of minor produce extracted departmentally increased in the Central and Western Circles while it decreased in the other two circles. The increase in the Central Circle was due chiefly to departmental hay operations in Guntūr and East Cuddapah. The increase in the Western Circle was small and calls for no explanation. The increase in the value of minor produce collected by purchasers was due in the Central Circle to keen competition among tangedu bark contractors and in the Southern to better sales. The decrease in the Western Circle occurred chiefly in Central Coimbatore owing to hay-making operations being left to private agency and partly in North Coimbatore owing to poor collection of gallnuts and other miscellaneous produce, while that in the Northern has not been explained.

31. The estimated value of forest produce removed by right holders was Rs. 41,517 against Rs. 50,766 and that granted free Rs. 28,562 against Rs. 20,057.

(6) Financial Results.

32. The following statement exhibits the financial results of the year as compared with those of the previous year and with the average of the preceding five years :—

Years.	Revenue.	Expenditure.			Surplus.
		A. Conservancy and Works including Refunds.	B. Establishment.	Total.	
	RS.	RS.	RS.	RS.	RS.
1912–1913	41,18,771	15,55,534	14,86,623	30,42,157	10,76,614
1911–1912	42,37,795	19,72,807	14,73,634	34,46,441	7,91,354
Average for the five years preceding 1911–12	38,30,239	18,25,778	11,73,990	29,99,768	8,30,472

The revenue and expenditure of the year show a decrease of Rs. 1,19,024 and Rs. 4,04,284 respectively as compared with the figures for the previous year. The expenditure under A. Conservancy and Works decreased by Rs. 4,17,273 while under Establishment it increased by Rs. 12,989. The net result must, in the Board's opinion, be considered quite satisfactory. It is sufficiently plain that the change from departmental to contract working has been beneficial to the department financially as well as in other ways.

33. The net surplus exceeded that of the previous year by Rs. 2·85 lakhs. Taking the circles individually, the financial results show a deficit in the Northern Circle and a surplus in other circles. The Southern Circle stands easily first with a surplus of 7½ lakhs. The Central Circle comes next with a surplus of 2¾ lakhs, while the Western Circle has converted the deficit of past years into a surplus of slightly over a lakh. As regards the deficit in the Northern Circle, the Conservator (Mr. A. W. Lushington) contends that the figures do not show the true working of the year, as expenditure under A. Conservancy is largely capital expenditure. Generally speaking it is of course obvious that a surplus balance can be no true criterion of successful forest management unless capital expenditure is properly separated from ordinary expenditure. In the present degraded condition of some of the forests of the Northern Circle a substantial surplus on the year's working could not be obtained with any due regard to the future.

It is observed that the deficit in the Northern Circle has fallen from Rs. 1,63,168 to Rs. 61,789 and the value of stock in hand at sale depots at the close of the year under review is estimated at Rs. 30,542.

34. The fall in the gross revenue of the year occurred under the following heads :—

	RS.
(1) Fuel (both by Government Agency and purchasers)	3,30,600
(2) Bamboos (both by Government Agency and purchasers) ...	38,761
(3) Grass and other minor produce (both by Government Agency and purchasers)	55,135

The large drop indicated by the above figures is counterbalanced by an increase under the following items :—

	RS.
(1) Sandalwood	1,28,827
(2) Grazing and fodder grass	59,494
(3) Timber	51,796
(4) Miscellaneous (including confiscated drift and waif wood) ...	65,355

The decrease was due to the following causes :—

(1) *Fuel.*

Introduction of the contract system of working generally in all the circles.

(2) *Bamboos.*

Leasing of bamboo coupes to contractors in the Northern Circle chiefly, payment of full lease amounts due for 1912-1913 in the previous year in Bellary and North Cuddapah and to non-sale of two coupes in North Coimbatore.

(3) *Grass and other minor produce.*

The fall is accounted for by a poor crop of tamarind and fall in the tree owners' fees in the Northern Circle; collection of only three tangedu bark kists as against five in the previous year in Bellary, the discontinuance of the sale of Rela (*Cassia fistula*) bark in Anantapur, stopping of the minor forest produce leases for Tuki (*Diospyros Ebenum*) and manure leaves in *East Cuddapah*; exemption of seigniorage on road metal collected by the contractors of the Local Fund Department, short removal of manure leaves owing to enhancement of seigniorage in *South Canara* and South Arcot and lower prices realized in *North Coimbatore* for avaram bark and tamarind.

The increase in revenue counterbalancing the large decrease under the above items is due to the causes shown below:—

(1) *Sandalwood.*

Extraction of a larger quantity of sandalwood and very good prices realized in local sales in the Southern Circle; sale of previous year's stock in the *Nilgiris* and *North Coimbatore* and better prices realized in the Western Circle.

(3) *Timber.*

Larger removals from unreserves and Rampa in the Northern Circle; sale of a larger number of plantation teak logs and poles in *South Malabar* and better prices obtained for more extensive sales of timber in *South Coimbatore*; and larger amount realized by sale of timber trees in Cumbum, Madura district.

(4) *Miscellaneous.*

Sale of 19 elephants and collection of arrear rents and value of additional lands leased out on the Anamalais in the Western Circle.

35. The expenditure under "A-Conservancy and Works" decreased by Rs. 2,99,384 under "I (*b*). Firewood" due to the adoption of the contract system of working fuel coupes, by Rs. 13,116 under "I (*a*). Timber," by Rs. 17,187 under "I (*c*). Bamboos," by Rs. 10,508 under "I (*d*). Sandalwood," by Rs. 18,983 under "VI (*b*) Feed and keep of cattle," by Rs. 15,411 under "VI (*c*) Stores, tools and plant," by Rs 12,215 under "VII (*a*) Roads and bridges," by Rs. 10,821 under "VIII (*a*) Demarcation," by Rs. 19,040 under "VIII (*b*) Cost of forest settlement" and by Rs. 36,864 under "VIII (*e*) Sowing and planting." The increased expenditure under "B. Establishment" was due to the debiting of pay and travelling allowance of the Forest Settlement officer, Vizianagram estate, to the forest accounts, to the time scale of pay of Imperial and Provincial officers, to increased establishment sanctioned for the District Forest Officer, Chittoor, to charges incurred for the Vernacular Training School (a fourth one having been opened during the year), to increased rate of grain compensation allowance sanctioned for certain districts, to advertisement charges for sales of timber and elephants and to the existence of the Direction office and North Vellore District Forest office during the whole year.

36. The following statement shows the financial results of the year after deducting capital expenditure not yielding an immediate outturn:—

	RS.
Gross revenue	41,18,771
Value of produce removed by right-holders and free grantees ...	70,079
Total ...	41,88,850
Gross expenditure	30,42,157

Deduct expenditure not yielding an immediate outturn—

	RS.
(1) Communications and buildings	3,61,307
(2) Cultural operations	1,70,327
(3) Working plans	— 183
(4) Settlement	12,804
(5) Surveys	30,944
(6) Demarcation	33,372
Total ...	6,08,571

Balance of direct revenue producing expenditure	24,33,586
Surplus of revenue over expenditure directly chargeable to revenue	17,55,264

ADMINISTRATION.

37. The Hon'ble Mr. W. O. Horne, C.S.I., was Forest Commissioner throughout the year. He toured with the Forest Committee in the districts of Nellore, Guntūr, Madura, Anantapur and Chingleput. He also visited the districts of Chittoor, the Nilgiris, Kurnool, Salem, South Canara, Malabar and Bellary. In South Canara he conferred with the Collector and the District Forest Officer regarding the departmental supply of fuel to Mangalore. He presided over the meeting of the Board of visitors of the Madras Forest College at Coimbatore on the 27th and 28th June 1913 to discuss various questions relating to the work and discipline of the College. The proceedings of the meeting are now before Government.

38. Mr. A. W. Lushington was in charge of the Northern Circle throughout the year, Mr. P. M. Lushington was in charge of the Central Circle up to 24th February 1913 and Mr. H. B. Bryant for the rest of the year. Mr. J. S. Battie and Mr. F. A. Lodge held charge of the Southern and Western Circles respectively throughout the year. The Conservators visited during the year all districts except Anantapur, Chingleput, South Canara, North Malabar and Central Coimbatore, and inspected all the District Forest offices except Anantapur. All District Forest officers except those of Kurnool East, Nellore, Tinnevelly and the Nilgiris spent sufficient time in touring; the short touring has been satisfactorily explained except in the case of the District Forest Officer, Tinnevelly. All the range offices except one in Kurnool West, one in East Cuddapah, a newly formed range, one in South Vellore, three in Tinnevelly (which were however inspected after the close of the year) and one in South Coimbatore were inspected by District Forest Officers. The accounts of the Forest offices except those of Kistna, Bellary, Chingleput and the Nilgiris were scrutinized by auditors from the Accountant-General's office and the results were reported to be generally satisfactory. The Assistant Accountant-General inspected the office of the District Forest Officer, the Nilgiris, but the accounts of that district were not audited in detail either in 1911-12 or in 1912-13.

39. The Forest year marked its commencement with the opening of the Forest College at Coimbatore, a fact which was noticed in last year's report. Two classes of students are now under training, the second batch having joined in July 1913.

The Forest Committee appointed in January 1912 completed its investigations and submitted its report at the beginning of January 1913. The Committee after visiting several typical districts where forests of many kinds were inspected, and after recording evidence from a large number of witnesses of all classes, has formulated a definite policy for future management of the forest property in this Presidency. Government have recently passed orders on the report and have been pleased to accept the bulk of the proposals. The gist of the Committee's scheme is to invoke the agency of the village panchayat for the control of a considerable portion of the present reserved area. Wherever reserves are intended mainly for grazing, or while being useful for grazing contain certain tree growth which is required mainly for rural needs, it is proposed that panchayats should be encouraged to undertake the duty of protection within the boundaries of the village concerned. The major reserves which must be preserved for climatic purposes and for the protection of water sources, as well as reserves which are valuable as producers of timber or fuel for the town market, will naturally remain in charge of the scientific forest officer. In the very large number of reserves, however, in which grazing and rural supply of fuel and small timber may be regarded as the dominant objects, the new scheme proposes to enlist the assistance of the villager himself for purposes of protection, and it is hoped by these means to remove the main cause of friction between the Forest department and the public. The interference of the low-paid subordinate in the daily life of the villager will thus be minimized. Moreover an attempt will be made through the medium of the panchayat to regulate the number and class of cattle admitted to the reserves for grazing.

The Committee also dealt with the supply of fuel and of leaf manure. In regard to fuel it has for some time past been the declared policy of Government to foster the contract system under which felling and removal are done by the purchaser. The earlier systems were known as the permit and depot systems respectively. The former allowed a permit-holder to enter the forest and cut what he chose, the only check and that a nominal one, being on the amount of produce removed. The depot system made

Government the chief fuel merchant in the market and endeavoured to ensure constant supply of cheap fuel at an unvarying price. The defects of both these systems are obvious. The former was wasteful and ruinous to the forests, and the latter while throwing on the forest officials a great burden of work *outside the forest* resulted in serious financial loss, the fuel being sometimes sold at less than cost price. The present policy is to leave the trade to follow its own natural lines.

With regard to leaf manure the policy of recent years has been to stimulate the use of green manure crops and to discourage the practice of obtaining leaves from the forest. The Committee endorses this policy. Actual experiment has proved that a fully stocked acre of fuel forest, stripped to the last leaf, yields little over one cart-load of leaf manure, and as a single acre of wet land requires at least two cart-loads, it is obvious that the supply from forest sources only must be inadequate. To this must be added the consideration that forests when stripped of their leaves rapidly deteriorate. The results of growing green manure on the land have been most encouraging and the practice is spreading rapidly especially in the area served by Periyar water.

As already noted the business of supply of seed for green manure crops and of stimulating experiments devolves on the Agricultural Department.

The question of fuel plantations was also considered by the committee who recommended that they should be got rid of altogether as a Government concern. This policy has already been partially adopted and steps are being taken to dispose of many of the casuarina reserves and plantations on the coast. The industry is now fully established and may safely be left to private individuals.

The Inspector-General of Forests visited the Presidency during the year and left on record a valuable note containing criticisms and suggestions. Action has already been taken on some of his suggestions and others are under consideration.

Effect has not yet been given to the division of the Gōdāvari district into three charges (already sanctioned by Government) owing to want of officers ; the Government have also lately sanctioned the division of South Canara into two forest charges ; this also cannot be given effect to for the present.

The result of the year's work was, as shown in paragraph 32, a net surplus of $10\frac{3}{4}$ lakhs or nearly three lakhs more than the figure of the previous year. This result was to a considerable extent due to the substitution of private for departmental agency in the distribution and felling of fuel. The total gross revenue was slightly less than in the previous year and the net result demonstrates the advantage of leaving the supply of the market to private agency. It must, however, be remembered that the main object of forest conservancy is not to amass revenue but to conserve for the public, both for present and future generations, the valuable property enshrined in the forests. For this purpose money has to be freely spent on establishments, on communications, and buildings and the present establishments are in many cases hopelessly inadequate for the duties required of them. A scheme for strengthening the subordinate staff has now for a considerable time been before Government.

40. The Board is glad to place on record its appreciation of the good work done by Conservators and District Forest-officers. In the Honours list of New Year's day, 1913, appeared the name of Mr. Lodge, Conservator of Forests, Western Circle, with a Companionship of the Most Eminent Order of the Indian Empire. While congratulating Mr. Lodge on this well deserved honour the Board would also congratulate the Forest Department on this public recognition of one of their principal officers. The Board regrets to record the death during the year of Mr. B. H. Barlow-Poole, Deputy Conservator and District Forest-officer, South Kurnool, and of Mr. N. M. Rego, Extra Assistant Conservator and District Forest-officer, Upper Gōdāvari. By their deaths the Government have lost two most zealous officers. The work of Mr. Daly, Extra Assistant Conservator and District Forest-officer, North Cuddapah, has recently been the subject of special enquiry and the Board is submitting his case for the consideration of Government.

The Madras Forest College, Coimbatore.

41. The Madras Forest College, Coimbatore, opened on 1st July 1912. Mr. F. C. L. Cowley-Brown was Principal of the College throughout the year except during a short period from 11th March to 17th April 1913. The first batch of

students numbering 31 entered the College. During the year five were removed for illness, incapacity, etc., and one died, leaving 25 on the roll at the end of the year. All these 25 students under training are already in Government service. The College was out in camp from 10th September to 20th December, from 17th January till 8th March and again from 6th May to 21st June. Towards the end of the second of these tours, the whole school suffered severely from fever and on return to head-quarters the Principal found it advisable to close the college and to advance the date of the vacation by three weeks. One of the students unfortunately died and the Principal himself had to go to a hospital in Bangalore for treatment. The students though not of a high intellectual standard, are reported to be striving to profit by the course and there can be no doubt that they will succeed. They are, for the most part, said to be a well set up body of young men.

The college and its hostels are at present temporarily located in the old hospital buildings and in private houses. The members of the staff spared no pains in adapting the buildings for the purposes required. The foundation stone of the new college was laid by His Excellency the Governor on the 9th April 1913 and the buildings are rapidly rising.

General.

42. The timber and sandalwood transit rules worked smoothly; in South Canara in the interest of Government some modifications to the rules have been proposed. The privileges allowed by the rules under section 26 of the Forest Act were generally availed of by the people and there were no complaints nor abuses except in Vizagapatam, Gōdāvari Lower, and to some extent in South Arcot.

43. Every encouragement is afforded to the mining industry. The mica industry in Nellore is steadily improving and the market continues favourable. The results of the year under report show an increase both in the output and in the royalty realised.

44. The number of elephants in charge of the Forest Department at the close of the year was 124 against 127 in the previous year. The decision to sell captures of young elephants was referred to in last year's report. Eighteen elephants have recently been sold at fair prices. The total number captured during the year was 20.

45. A memorandum of minor discrepancies found in the Circle reports is appended.

(True Extract.)

W. G. McFarland,
Secretary.

To the Secretary to Government, Revenue Department.

APPENDIX.

Northern Circle.

(i) *Appendix B, page II of the Appendices—*

(*a*) The figure 497 entered in column 3 against Lower Gōdāvari is a mistake for 479.

(*b*) The figure 4,613 in column 5 against total should be altered into 4,614.

(ii) *Form No. 70, pages XVI to XIX of the Appendices—*

(*a*) The figure 837 in column 12 against "Total—Ganjam" in page xvii is a clerical mistake for 870.

(*b*) The figure 3,297 in column 13 in page xix against "Total—Northern Circle" is a mistake for 30,297.

(iii) *Form No. 71, page XXII of the Appendices—*

The figure 413 in column 2 against "Total—B" is a mistake for 433.

(iv) *Form No. 73, page XXVIII of the Appendices—*

The area of reserved lands in Upper Gōdāvari, 99 square miles, shown in column 8, has not been exhibited in any of the columns 2 to 7.

(v) *Form No. 74, pages XXX to XXXII of the Appendices—*

(a) The number 31,386 of cows and bullocks entered in column 13 against the first total is a mistake in totalling, for 37,386. The figure in column 13 against "Grand total" should also be altered into 69,688.

(b) In the abstract of animals licensed to graze on payment, printed at page xxxii of the Appendices, the figures 366,743 and 644,555 are mistakes for 372,743 and 650,555.

(vi) *Form No. 76, pages XXXIV to XXXIX of the Appendices—*

(a) The figure 207,474 in column 12 against "Total—Vizagapatam" at page xxxv is a mistake for 207,494.

(b) The figure 3,661 in column 3 against "Total—Kurnool West" at page xxxvi is a mistake for 6,481.

(c) The figure 7,826,657 in column 11 against "Total—Kurnool South" is a mistake for 782,657.

(d) The figures 12,25,178, 15,72,394, 61,79,258 in the second grand total column at pages xxxviii and xxxix should be altered into 12,62,711, 16,09,927 and 62,16,791.

(vii) *Form No. 77, page XL of the Appendices—*

The figure 84,418 in column 8 against Miscellaneous is a mistake for 84,318.

(viii) *Summary of receipts and expenditure—page XLVI of the Appendices—*

The total 447,863 under "A. Conservancy and Works including refunds" in column 3 is a mistake for 447,803.

Central Circle.

(i) *Appendix to Annual Form No. 71, printed at page XXVI of the Appendices—*

(a) All the three cases of "injury to forests by fire" shown in column 3 against "B" in Guntūr in the statement at page lii of the Appendices to the report for 1911–1912, have been accounted for in the Appendix printed at lxiii of the Appendices to the report of that year. Two cases in Guntūr are now accounted for as pending cases of the previous year in the above appendix. This is not understood.

(b) The one case of "injury to forests by fire" shown in column 3 against "B" in Guntūr in the statement at page xxiv of the Appendices has not been accounted for in the Appendix at page xxvi.

(ii) *Form No. 78, page XXXIX of the Appendices—*

The opening balance in column 2 against "Fuel" in the Circle total does not agree with the closing balance entered in column 6 against "Total—Central Circle" in the statement at page C-1 of the Appendix to the Forest Administration Report for 1911–12. The discrepancy has not been explained.

Southern Circle.

(i) As per appendix A at page i of the Appendices, the area of reserved forests in North Arcot district is 796,024. In Form No. 65, at page vi of the Appendices the area of North and South Vellore divisions comprised in North Arcot district is entered as 319,170 and 476,847 acres respectively which work up to 796,017 acres. The discrepancy has not been explained.

(ii) As per Appendix A at page i of the Appendices the area of reserved lands in the same district is 74 acres. In column 12 of Form No. 65 printed at page vi, it is entered as 80 acres. The discrepancy has not been explained.

(iii) The number of animals allowed to graze free "during pleasure of Government or otherwise than under Settlement," shown in columns 23 to 25 of Form No. 74 at page xxxiii of the Appendix has been wrongly included in the "Abstract of animals licensed to graze on payment" at page xxxiv. The figures in the abstract statement 18,953, 653,044; 594,270 and 13,12,568 should accordingly be altered into 18,514; 651,457; 594,236 and 1,310,508.

Order—No. 155, Revenue, dated 16th January 1914.

Forest No. 8.

Recorded.

2. During the year under review two reports of great importance to Forest administration were dealt with.

The first was that of the committee appointed in G.O. No. 1677, Revenue, dated 5th June 1912, to deal with the more pressing problems of the administration so far as they affected the relations between the department and the agricultural population. Orders on the recommendations of the committee were passed in G.O. No. 3020, Revenue, dated 13th October 1913. The Government hope that the result

of those orders will be the creation of more cordial relations between the officers of the department and the ryots, the establishment of more effective departmental control over the more important forests, and at the same time the promotion of the interests for which the smaller reserves were constituted.

The second report was the valuable note of the Inspector-General of Forests, Mr. Beadon Bryant, on forest revenue and expenditure in Madras. This dealt chiefly with matters of departmental importance. His main conclusions were that a low proportion of expenditure to revenue should not be aimed at, that economies should be effected under building, sowing and planting, that the extension of plantations should be discouraged, that the policy of substituting contract working for departmental agency should be persisted in and that the staff should be reorganized. These subjects are being dealt with separately.

3. The principal event during the year was the opening of the Forest College at Coimbatore. The students are accommodated in the old hospital and private houses pending completion of the new buildings.

4. In reviewing the report for the previous year the Government urged the vigorous extension of exploitation by private agency particularly in the Western and Northern Circles. It is observed that in the year under report there was in these circles a considerable replacement of departmental by private agency in dealing with fuel.

5. Better progress than in the previous year was made in reservation, the area constituted into reserved forest having risen from 7 to 48 square miles. Nevertheless the area remaining to be constituted into reserved forests rose to 656 square miles. Of this area, however, more than a third has since been notified.

6. Mr. Beadon Bryant observed in his recent note that the position of the department in regard to working-plans is not satisfactory. Working-plans were prepared for a much larger area in 1912–13 than in 1911–12, but the Government are aware that without additional establishment little can be done in this direction and the question of obtaining such establishment is now engaging attention.

7. The large decrease in the area reported as having been burnt is satisfactory.

8. The marked increase in the net surplus of receipts over expenditure was due to a fall under the latter head which, the Board observes, is to a considerable extent consequent on the substitution of private for departmental agency in the felling and distribution of fuel. This is a very satisfactory form of economy. It is observed that the Western Circle has converted its customary deficit into a considerable surplus and that the deficit of the Northern Circle has been largely reduced as compared with the previous year.

9. The Government note with pleasure the Board's appreciation of the good work done by the officers of the department, and they desire to place on record their appreciation of the administration of the department by the Hon'ble Mr. W. O. Horne.

10. In conclusion the Government request that the Board will consider whether the great mass of statistics attached to the report could not be reduced by omitting some of the returns attached thereto and by simplifying others.

(True Extract.)

A. BUTTERWORTH,
Ag. Secretary to Government.

To the Board of Revenue (Land Revenue--Forests).
,, Accountant-General.

Copy to the Public (X) Department.
,, the Hon'ble Mr. W. O. Horne, C.S.I., I.C.S.
,, Government of India, Department of Revenue and Agriculture (with C.L.)

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